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PERSONAL.

Mr. Gillett Gordon has been appointed Superintendent of the water-works at Connersville, Ind., to succeed Mr. Daniel Castleman, who has resigned.

Lieut. Arthur S. Carswell, Second Regiment, U. S. Volunteer Engineers, at present stationed at Willet's Point, N. Y., has been ordered to duty at Huntsville, Ala.

Mr. Andrew Bryson, M. Am. Soc. C. E., of 29 Broadway, New York, has gone to Central America to report upon an enterprise for a syndicate of capitalists of that city.

Mr. William Murdock has been appointed Assistant Engineer of Maintenance of Way of the Toledo Division of the Pennsylvania Lines west of Pittsburg, with headquarters at Toledo, O.

Capt. Archibald O. Powell, Second Regiment of U. S. Volunteer Engineers, has been ordered to duty at St. Paul, Minn., under Maj. Frederick V. Abbot, Corps of Engineers, U. S. Army.

Mr. M. Roberts, Master Mechanic of the St. Louis, Iron Mountain & Southern Ry., has been appointed Master Mechanic of the whole system in Arkansas and Missouri, with headquarters at Argenta, Ark.

Mr. Albert S. Cheever, M. Am. Soc. C. E., of Cleveland, O., has been appointed Chief Engineer of the Fitchburg R. R., with headquarters at Fitchburg, Mass., to succeed Mr. Frank O. Melcher, M. Am. Soc. C. E., promoted.

Mr. James P. Nelson, civil and mechanical engineer, recently Professor of Civil Engineering in the Kentucky State College, has entered upon his duties as office assistant to the Chief Engineer of the Choctaw & Memphis R. R., with headquarters at Little Rock, Ark.

Mr. Willis S. Jones, formerly Chief Engineer of the Chicago & Northern Pacific Ry., has been appointed General Manager of the Q. & W. Co., with headquarters in the Owings Building, Chicago. This company is introducing a new form of tie-plate.

Mr. Charles B. Price, Division Superintendent of the Allegheny Valley Ry., with headquarters at Pittsburg, Pa., has been promoted to be Acting General Superintendent, to succeed Mr. David McCargo, who has been incapacitated on account of an attack of paralysis several months ago.

Mr. L. L. Dawson, Master Mechanic of the Illinois Central R. R., with headquarters at Memphis, Tenn., has been appointed Master Mechanic of the New Orleans Division, with headquarters at McComb City, Miss., to succeed Mr. W. B. Baldwin, who was recently killed by jumping from an engine.

Mr. C. H. Doebler, Division Master Mechanic of the Wabash R. R., with headquarters at Fort Wayne, Ind., has been transferred in that capacity to Springfield, Ill., to succeed Mr. G. W. Mudd. Mr. Geo. W. McKee, Master Mechanic of the Shops at Moberly, Mo., will succeed Mr. Doebler at Fort Wayne.

Mr. William R. Greene, of Baltimore, Md., has been elected Vice-President of the Baltimore & Ohio Southwestern Ry., with headquarters in Cincinnati, O., to succeed Mr. W. W. Peabody. He was formerly General Manager of the Cleveland, Cincinnati, Chicago & St. Louis Ry., and later of the Cincinnati, Hamilton & Dayton Ry.

Messrs. A. Dutrex, P. Mossot, T. Ballryder and F. Lurmann, mechanical engineers, of Mont Lucon, France, are visiting the United States for the purpose of studying American methods of manufacturing steel and iron. They are connected with the large iron works at Mont Lucon, and will return there in about three weeks. They were in Cleveland, O., on Dec. 4.

Mr. P. J. Harrigan, General Foreman of Car and Locomotive Repairs, with headquarters at Connellsville, Pa., has been promoted to be Master Mechanic of the Middle Division of the Baltimore & Ohio R. R., with headquarters at Cumberland, Md., to succeed Mr. D. C. Courtney. Mr. David Witherspoon has been appointed to succeed Mr. Harrigan, at Connellsville.

Mr. J. H. Payne, formerly in the office of the Division Engineer of the Union Pacific R. R., with headquarters in Denver, Colo., has been appointed Assistant Engineer on the Denver & Gulf system, succeeding Mr. H. A. Woods, who has resigned to accept the appointment of Assistant Chief Engineer of the Grand Trunk Ry., with headquarters at Detroit, Mich.

Mr. De Clermont Dunlap, M. Am. Soc. C. E., civil and consulting engineer, of Chicago, Ill., has been appointed Engineer of Location and Construction of the new lines of the Chicago & Northwestern Ry., with headquarters at Wall Lake, Ia. Mr. C. A. Lichty, Assistant Engineer of the Madison Division, with headquarters at Baraboo, Wis., has been transferred to Wall Lake as assistant to Mr. Dunlap.

Mr. Austin A. Lister, of the firm of R. A. Lister & Co., Ltd., of Dursley, Gloucestershire, England, dairy and agricultural engineers and manufacturers, is at the Gibson House, Cincinnati, O. He is visiting the United States for the purpose of studying the manufacture of malleable castings, and upon his return his firm will establish a foundry in England for the manufacture of malleable castings according to American methods.

OBITUARY.

Mr. James Nolan, civil engineer, of Plainfield, N. J., died Dec. 4, of pneumonia.

Mr. Edward Kilpatrick, contractor and builder, of New York city, died Dec. 5, aged 69.

Mr. George D. Inks, Street Commissioner, of McKeesport, Pa., died Nov. 24, aged 78.

Mr. Morris P. Janney, mechanical engineer, of Pottstown, Pa., died Nov. 30, aged 49.

Mr. David Campbell, builder and contractor, of Mount Vernon, N. Y., died Nov. 27, aged 73.

Major Joseph H. Francis, for many years Manager of the Metropolitan Telephone Co., of New York city, died at his home in Passaic, N. J., Nov. 28.

Mr. P. J. Carr, a civil engineer on the surveying corps of the Illinois Central R. R., which has been locating a new line to Omaha, Neb., was killed in an accident, Nov. 29, at Sioux City, Ia. He was an Englishman, and had only been in this country a short time.

Mr. R. B. F. Peirce, General Manager of the Indiana, Decatur & Western Ry., with offices in Indianapolis, Ind., died Dec. 5, aged 55. He was also the Receiver of the Toledo, St. Louis & Kansas City R. R., with offices in Toledo, O., until a few days ago, when he resigned on account of ill-health.

Mr. James G. Lindsley, Superintendent of the Newark Lime & Cement Mfg. Co., Newark, N. J., died at his home in Kingston, N. Y., Dec. 4. He was born in Orange, N. J., March 19, 1819. Mr. Lindsley was elected the first Mayor of Kingston, in 1872, serving several years, and was a Member of Congress in 1884, representing Ulster, Greene and Delaware counties. He was well known as a geologist.

Col. James Francis, M. Am. Soc. C. E., Consulting Engineer of the Locks & Canals Co., on the Merrimac River, Mass., and son of the late James Bicheno Francis, Hon. M. Am. Soc. C. E., who was President of the society in 1881, died Dec. 1, aged 58. He was a veteran of the Civil War and in 1866 was appointed Assistant Engineer for the Locks & Canals Co., in 1885 becoming its Agent and Engineer. He was appointed General Agent in 1896.

Mr. John Taylor Gause, President of the Harlan & Hollingsworth Co., Wilmington, Del., ship and car builders, died of pneumonia, Dec. 1, aged 75. He was born in Chester, Pa., and went to Wilmington in 1843, entering the office of the above company as an errand boy. In 1858 he was admitted to the firm as an equal partner with Mr. Samuel Harlan. In 1867 the firm became a company, and Mr. Harlan its President. Mr. Gause succeeded him as President in 1883, holding the office until 1896, when Mr. Henry G. Morse succeeded him. In August last Mr. Morse retired, and Mr. Gause again became the President of the company.

Mr. Freeman Godfrey, formerly a railway contractor and later a manufacturer of plaster, of Grand Rapids, Mich., died Nov. 25. He was born in Varshire, Vt., Sept. 5, 1825, and in 1845 went to Lowell, Mass. In 1851 he was a contractor on the Terre Haute & Alton R. R., and in the following years built a portion of the Illinois Central R. R. In 1856 he began the construction of the Detroit & Milwaukee R. R., which was completed two years later. He built a considerable portion of the Grand Rapids & Indiana R. R. in 1859-60, and was also interested in the construction of the Grand River Valley R. R., now a part of the Michigan Central R. R. He was also prominent in the organization of the Grand Rapids & Holland R. R. Co., of which he was elected President.

ENGINEERING SOCIETIES.

COMING TECHNICAL MEETINGS.

ST. LOUIS RAILWAY CLUB.
Dec. 9. Secy., H. H. Roberts, 511 Commercial Bldg., St. Louis, Mo.

NEW JERSEY SANITARY ASSOCIATION.
Dec. 9-10. Annual meeting, Lakewood, N. J. Secy., James A. Exton, Arlington, N. J.

MONTANA SOCIETY OF ENGINEERS.
Dec. 10. Secy., A. S. Hovey, National Bank Bldg., Helena, Mont.

THE LOUISIANA ENGINEERING SOCIETY.
Dec. 12. Secy., J. F. Coleman, 712 Union St., New Orleans, La.

ENGINEERS' CLUB OF KANSAS CITY.
Dec. 12. Secy., F. W. Tuttle, Baird Bldg., Kansas City, Mo.

DENVER SOCIETY OF CIVIL ENGINEERS.
Dec. 13. Secy., W. B. Lawson, 36 Jacobson Bldg., Denver, Col.

CIVIL ENGINEERS' CLUB OF CLEVELAND.
Dec. 13. Secy., Wm. H. Searles, Case Library Bldg., Cleveland.

NORTHWEST RAILWAY CLUB.
Dec. 13. Secy, T. A. Foque, Soo Line, Minneapolis, Minn.

NEW ENGLAND RAILWAY CLUB.
Dec. 13. Secy., Edw. L Janes, P O Box 1158, Boston, Mass.

FRANKLIN INSTITUTE.
Dec. 13. "Commercial Photometers and Light Standards," Prof. A. J. Rowland; "The Kite as an Instrument in Meteorological Research," Prof. C. F. Marvin; Dec. 14. Fresh Studies of Pioneer Tools," Prof. H. C. Mercer. Secy., Wm. H. Wahl, 15 South Seventh St., Philadelphia, Pa.

NEW ENGLAND WATER WORKS ASSOCIATION.
Dec. 14. Quarterly meeting, Boston, Mass. Secy., J. C. Whitney, Newton, Mass.

NEW YORK RAILROAD CLUB.
Dec. 15. Secy., W. W. Wheatley, 168 Montague St., Brooklyn, N. Y.

ENGINEERS' CLUB OF CINCINNATI.
Dec. 15. Secy., J. F. Wilson, P. O. Box 333, Cincinnati, O.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.
Dec. 15. Secy., F. A. Charpiot, P. O Box 13, Savannah, Ga.

AMERICAN INSTITUTE AND THE HENRY ELECTRICAL SOCIETY.
Dec. 16. "Light," William Hallock. Secy., D. R. Lovejoy, 111 W. 38th St., New York city.

ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.
Dec. 16. Secy., F. H. Olmsted, Byrne Bldg., Los Angeles, Cal.

ROCHESTER ENGINEERING SOCIETY.
Dec. 16. Secy., John F. Skinner, Reynolds Library Bldg., Rochester, N. Y.

NORTHWESTERN TRACK AND BRIDGE ASSOCIATION
Dec. 16. Secy., D. W. Meeker, St. Paul, Minn.

CHICAGO ELECTRICAL ASSOCIATION.
Dec. 16. "Wireless Telegraphy," Arthur V. Abbott. Secy., J. R. Cravath, 525 Monadnock Block, Chicago, Ill.

THE ENGINEERS' CLUB OF PHILADELPHIA.
Dec. 17. Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.

ENGINEERS' CLUB OF COLUMBUS.
Dec. 17. Secy., H. M. Gates, 12½ North High St., Columbus, O.

ENGINEERS' CLUB OF PHILADELPHIA.
Dec. 17. Secy., L. F. Rondinella, 1122 Girard St., Philadelphia, Pa.

ENGINEERS' AND ARCHITECTS' CLUB OF LOUISVILLE.
Dec. 19. Secy., Marshall Morris, 16 Norton Bldg., Louisville, Ky.

ENGINEERS' CLUB OF MINNEAPOLIS.
Dec. 19. Secy., H. E. Smith, 1620 S. E. 14th St., Minneapolis, Minn.

TECHNICAL CLUB OF OMAHA.
Dec. 19. Secy., J. Harry Lawrie, Omaha, Neb.

ENGINEERS' SOCIETY OF WESTERN PENNSYLVANIA
Dec. 20. Secy., R. A. Fessenden, 410 Penn Ave., Pittsburg, Pa.

WESTERN RAILWAY CLUB.
Dec. 20. Secy., F. M. Whyte, 225 Dearborn St., Chicago, Ill.

ENGINEERS' AND ARCHITECTS' ASSOCIATION OF SOUTHERN CALIFORNIA.
Dec. 21. Secy., Frank H. Olmsted, Los Angeles, Cal.

BOSTON SOCIETY OF CIVIL ENGINEERS.
Dec. 21. Secy., S. E. Tinkham, City Hall, Boston, Mass.

WESTERN FOUNDRYMEN'S ASSOCIATION.
Dec. 21. Secy., B. M. Gardner, 1522 Monadnock Block, Chicago, Ill.

ENGINEERS' CLUB OF ST. LOUIS.
Dec. 21. Secy., Richard McCulloch, 2401 N. Spring Ave., St. Louis, Mo.

AMERICAN SOCIETY OF CIVIL ENGINEERS.
Dec. 21. "Building Laws" Discussion. Secy., C. W. Hunt, 220 West 57th St., New York City.

WESTERN SOCIETY OF ENGINEERS.
Dec. 21. "Foundations for Railroad Bridge Across the St. Lawrence River at Cornwall, Ont.," George E. Thomas. Secy., N. L. Litten, Monadnock Block, Chicago, Ill.

CANADIAN SOCIETY OF CIVIL ENGINEERS.
Dec. 22. Secy., C. A. McNab, 112 Mansfield St., Montreal, Canada.

ENGINEERING ASSOCIATION OF THE SOUTH.
Dec. 22. Secy., C. B. Wilson, 1000 Broad St., Nashville, Tenn.

AMERICAN INSTITUTE OF ELECTRICAL ENGINEERS
Dec. 28. Secy., Ralph W. Pope, 26 Cortlandt St., New York city.

ENGINEERS' SOCIETY OF WESTERN NEW YORK.
Jan. 2. Secy., H. J. March, Library Bldg., Buffalo, N. Y.

CIVIL ENGINEERS' SOCIETY OF ST. PAUL.
Jan. 2. Secy., C. L. Annan, City Engineer's Office, St. Paul, Minn.

FOUNDRYMEN'S ASSOCIATION, PHILADELPHIA.
Jan. 4. Secy., Howard Evans, Pier 45, Delaware Ave., Philadelphia, Pa.

BROOKLYN INSTITUTE OF ARTS AND SCIENCES.
Jan. 6. "The Electro-Metallurgy of Copper," John B.F. Hereschoff. Secy., Henry L Weed, Brooklyn Institute of Arts and Sciences, Brooklyn, N. Y.

AMERICAN INVENTORS' AND MANUFACTURERS' ASSOCIATION.
Jan. 15. Annual meeting, Washington, D. C. Secy., Arthur Steuart, Washington Loan and Trust Bldg., Washington, D. C.

NORTHWESTERN ELECTRICAL ASSOCIATION.
Jan. 19-21. Semi-annual meeting, Milwaukee, Wis. Secy., Thos. R. Mercein, 511 Montgomery Bldg., Milwaukee, Wis.

TECHNICAL SOCIETY OF THE PACIFIC COAST.
Jan. 20. Annual meeting. Secy., O. Von Geldern, 819 Market St., San Francisco, Cal.

NATIONAL ASSOCIATION OF MANUFACTURERS.
Jan. 24-26. Annual convention, Cincinnati, O. Secy., E. P. Wilson, Room A, Chamber of Commerce, Cincinnati, O.

INDIANA ENGINEERING SOCIETY.
Jan. 24-26. Annual meeting, Indianapolis, Ind. Secy., C. B. Nelson, 61 Baldwin Block, Indianapolis, Ind.

MICHIGAN ENGINEERING SOCIETY.
Jan. 24-26. Annual meeting, Lansing, Mich. Secy., F. Hodgman, Climax, Mich.

ILLINOIS SOCIETY OF ENGINEERS AND SURVEYORS.
Jan. 25-27. Annual meeting, Champaign, Ill. Secy., Jacob A. Harman, Peoria, Ill.

ENGINEERS' CLUB OF PHILADELPHIA.—At the special meeting of this club, held Dec. 3, officers were nominated for the ensuing year as follows: Pres., Francis Schumann; Vice-Presidents, Dr. Henry Leffmann and William C. L. Eglin; Secy., L. F. Rondinella; Treas., George T. Gwilliam; Directors, Harrison Souder, W. L.

Webb, Charles Riez, Dr. H. M. Chance, Wilfred Lewis, William P. Evans, Clark Dillenback, Richard L. Humphrey, C. H. Ott and Edwin L. Smith. The annual election will occur on the third Saturday in January. Mr. R. W. Lesley read an interesting paper on "Cement and Cement Testing Laboratories."

THE AMERICAN SOCIETY OF CIVIL ENGINEERS.—This society will hold its 46th annual meeting at the House of the Society, 220 West 57th St., New York city, on Jan. 18 and 19.

ROCHESTER ENGINEERING SOCIETY.—A special meeting of this society was held on Dec. 1 to consider the proceedings of the recent Washington Convention of the Society of Municipal Improvements.

NEW ENGLAND WATER WORKS ASSOCIATION.—The quarterly meeting of this association will be held at Tremont Temple, Boston, Mass., on Dec. 14. The following papers will be read:

"Possibilities of Economy in Pumping Engines, as based on the latest accomplishments," George H. Barrus, Boston, Mass.; "The Advantages of Triple Expansion Pumping Engines," J. M. Betton, Brooklyn, N. Y.; "The Latest Designs in Pumping Machinery, comparing same with practice of Twenty Years Ago," representative of the E. P. Allis Co., Milwaukee, Wis.; "The Latest Designs in Pumping Machinery, comparing same with practice of Twenty Years ago," representative of Henry R. Worthington, Brooklyn, N. Y.; "The Application of Oil and Gasoline Engines to Pumping Machinery," Freeman C. Coffin, Boston, Mass.; "Comparison between Low and High Duty Pumping Engines on a Small Water Works Plant," John E. Smith, Andover, Mass.

In addition an excursion will be made to the Chestnut Hill Pumping station.

ROADMASTERS' ASSOCIATION OF AMERICA.—At a meeting of the Executive Committee, held in Chicago on Nov. 22, subjects were selected and committees appointed to report thereon at the next annual convention. The subjects, and the chairmen of the several committees, are as follows:

1. "Advisability of Increasing the Length of Rails and Using Miter Joints; and the Difference in Expansion of Light and Heavy Rails," V. T. Douglas, Chesapeake & Ohio R. R., Richmond, Va.

2. "Track Joints; the Results Obtained from the Use of Various Devices," P. Rockwell, Missouri, Kansas & Texas Ry., Sedalia, Mo.

3. "Standard Fences for Right of Way," J. A. Prentice, Lake Shore & Michigan Southern Ry., Toledo, O.

4. "Best Method of Tamping Ties in Various Kinds of Ballast" (A, tamping all ties with shovels; B, tamping joint ties with picks and all others with shovels; C, tamping all ties with picks; D, tamping all ties with bars); W. H. Courtney, Keokuk & Western R. R., Osceola, Ia.

5. "Embellishment of Station Grounds." M. Sullivan, Michigan Central R. R., Miles, Mich.

There will also be a paper by F. R. Coates, New York, New Haven & Hartford R. R., Stamford, Conn., and a paper on "Standard and Compromise Cars, in Relation to Their Effect upon the Track," by C. C. Dunn, Supervisor Atlantic Coast Line, Wilmington, Del.

J. B. Dickson, Sterling, Ill., Secy.

THE NATIONAL MUNICIPAL LEAGUE.—The 6th national conference for good city government was held, beginning Nov. 30 and continuing until Dec. 2, at Indianapolis, Ind., with fully 250 persons present. Mr. Clinton R. Woodruff presided at the opening meeting and delivered an address on "The Advance of Municipal Reform in the United States." This was followed by the "Report of the Committee on Municipal Program," which was reviewed editorially in our last issue. In the evening addresses by Mr. Samuel B. Capen, "The Final Work of the Nineteenth Century," and Mr. Wm. D. Foulke, were presented, the latter confining his remarks chiefly to a review of the report of the Committee on Municipal Reform. A large part of the two convention days was devoted to the consideration and discussion of the subject of model municipal system based upon a careful study of actual conditions. At the second day's session Mr. Horace E. Deming read a paper entitled "The Municipal Problem in the United States," which met with general approval in the discussion that followed.

The afternoon session opened with a paper entitled "The Place of the Council and of the Mayor in the Organization of Municipal Government—The Necessity of Distinguishing Legislation from Administration," by Dr. Frank J. Goodnow. This paper was also fully discussed.

The paper of the forenoon of the last day on "The City in the United States—The Proper Scope of its Activities," was read by Dr. Albert Shaw. In the afternoon Mr. Charles Richardson read a paper entitled "Municipal Franchises."

NEW PUBLICATIONS.

METEOROLOGICAL OBSERVATIONS IN COLORADO IN 1897. Bulletin No. 49, The Agricultural Experiment Station of the State Agricultural College, Ft. Collins, Col. By L. G. Carpenter and R. E. Trimble. Paper; 6 × 9 ins.; pp. 71; illustrations and tables. Address Director of the Experiment Station, Ft. Collins, Col.

The various instruments used at the station are described in this report, and the records for 1897 are presented in tabular and graphical form. One of the most interesting diagrams is a sunshine chart, showing by black lines the amount of sunshine for each day of the year and the part or parts of the day during which sunshine occurred.

HISTORY OF THE SPANISH-AMERICAN WAR.—With handy atlas, maps and full descriptions of recently acquired United States territory. Published by the Lawrenceville Cement Co., makers of Beach's Rosendale Cement. 26 Cortlandt St., New York city. Paper, 14 × 11 ins. Maps and portraits.

This useful publication, issued with the compliments of the company to its patrons, contains very good maps of the Philippine Islands, Hawaii, Cuba, Porto Rico, and Alaska, and also portraits of the President, and the chief military and naval commanders. The events of the war are briefly recorded in chronological order, and the new possessions of the United States are statistically described.

SOME EXPERIENCE WITH AN INTERNAL COMBUSTION MOTOR.—By W. L. Garrels, 4531 West Pine Boulevard, St. Louis, Mo. Pamph.; 6 × 9 ins.; pp. 11.

Mr. Garrels recently bought a 14-HP. oil engine, of a make which was extensively advertised a few years ago and was highly recommended by many well-known engineers. "It proved to be afflicted with almost every disease that such an engine can be afflicted with." He experimented with it for about five months, and succeeded in getting it to run a few hours. The makers "sent on a man" who did not succeed any better. "They stopped answering our letters altogether and finally sent us an impertinent answer to a registered letter."

Instead of bringing suit against the makers, as any ordinary man would have done, Mr. Garrels, who is an extraordinary man, spent a great deal of time and money in hunting up other people who had had similar difficulties with the same make of engine and then wrote up the whole story and sent it to a "well-known Eastern technical paper" (name not given), which after a while returned it with the following statement:

The case is extremely interesting, to put it very mildly, but we feel here that in publishing it we should run a decided risk of a libel suit.

Mr. Garrels therefore publishes the article, together with his reflections on the "snobbishness" of newspapers and their failure to "follow Truth though she leads to Hades," in pamphlet form. We know of no end which he attains by this that he might not have better secured by suing the company for damages. Whether or not his pamphlet is libelous, it would take a judge and twelve jurors to decide, but it is certainly of too little interest to permit any reputable technical journal to publish it, as its author desired.

ASSESSMENT, TAXATION AND MUNICIPAL FRANCHISES IN KANSAS.—Extract from the Annual Report of the Kansas Bureau of Labor and Industrial Statistics for 1897. Paper; 6 × 9 ins.; pp. 115; folding plates and tables.

The portion of this pamphlet which relates to taxation shows most forcibly the gross inequalities in assessed valuations prevailing in Kansas, as all over the United States. The statutes of Kansas provide that all property shall be assessed at its full value; it also authorizes the local assessors in each county to "agree upon an equal basis of valuation of such property as they may be called upon to assess." This clause is interpreted to mean not only values for specific objects, as wheat or cows, but the percentage of the true value to be used by the assessors. The detailed results of these agreements show the evident variations in specific values and percentages of actual values, while records of real estate transfers and the taxes levied on the property involved show that the local assessors do not live up to their agreements. Thus the assessors collectively may be said to conspire to disobey the law, and individually to vie with each other in reducing the actual percentages of valuation still lower, both lines of action being prompted largely by the desire to evade state taxes. Figures are also presented which, it is claimed, show discrimination on the part of the assessors in favor of large property owners.

The second part of the pamphlet gives the results of an investigation of the "private and municipal ownership of water, gas and electric-light plants," agreed upon by the National Association of Officials of Bureaus of Labor Statistics at Albany, in 1896. While there are many interesting and valuable facts and figures in this section, they are hardly conclusive, so far as they relate to the relative advantages of the two kinds of ownership. The reason for this is very largely the fact that the attempt to present the comparative cost of service under the two plans ignores most of the local conditions affecting cost. For instance, the cost of water-works plants and the meter charges for water are each given per 1,000 gallons of water consumed, without reference to the factors governing cost of construction and operation in the several localities. Undoubtedly the bureau would have done more and better work had it had an ample appropriation and staff, but money was lacking and the staff is hardly large enough to conduct the ordinary routine of a small office, to say nothing of elaborate investigations. The bureau therefore deserves praise for its courage in attempting the work and credit for its results. The schedules of inquiries for the second part of the pamphlet, it should be said, were not prepared by the Kansas bureau and were elaborated by it because they were considered inadequate.

TRADE PUBLICATIONS.

(The standard sizes for pamphlets and trade catalogues recommended by all the principal engineering societies of the United States are: 3 1-2 x 6 ins.; 6 x 9 ins., and 9 x 12 ins.)

LAWN SPRINKLERS.—Pleuger & Henger Mfg. Co., St. Louis, Mo. Pamph., 6 × 9¼ ins.; pp. 20.

ENCLOSED ARC LAMPS.—General Electric Co., Schenectady, N. Y. Pamph., 5¼ × 7¾ ins.; pp. 58.

This neat pamphlet describes the various types of enclosed arc lamps put upon the market by the General Electric Co. The pamphlet contains excellent half tone illustrations of the interior and exterior of several forms of these lamps.

STOW-FLEXIBLE SHAFT.—Stow Flexible Shaft Co., 26th and Callohill St., Philadelphia, Pa. Pamph., 6 × 9 ins.; pp. 56.

This pamphlet contains a series of illustrations and descriptions of drills, boring machines, countershafts, transfer pulleys, and various other apparatus and parts manufactured by this company for use in connection with the well-known Stow Flexible shaft, which it also manufactures.

WIRE ROPE.—A. Leschen & Sons' Rope Co., St. Louis, Mo. Paper, 6 × 9¼ ins.; pp. 72.

This is a catalogue and price list of ordinary and special makes of wire rope, including those having flattened and triangular strands, as used for elevators and hoisting purposes. There are also rope clamps, thimbles, hooks, hoisting and power transmission sheaves, lamp ropes, etc. The company also handles Carr's grip for endless rope haulage in wires and builds cableways, wire rope tramways (Hallayson's patent), and logging machinery.

CONSTRUCTION NEWS.

CONDENSED LIST OF CONTRACTS PENDING WITH DATE OF OPENING BIDS.

Bids to be opened.	Work.	Place.	See Eng. News.
Dec. 8.	Bridge approach,	Zanesville, O.	Nov. 18
Dec. 8.	Police patrol system,	Youngstown, O.	Nov. 24
Dec. 8.	Electric light plant,	Litchfield, Ill.	Dec. 1
Dec. 8.	Sale of floating dock,	Havana, Cuba	Dec. 1
Dec. 8.	Park work,	New York, N. Y.	Dec. 1
Dec. 8.	Water pipe, boilers, etc.,	New York	Dec. 1
Dec. 8.	Pipe sewers,	Wilkinsburg, Pa.	Dec. 8
Dec. 9.	Bridge approach,	E. Grand Forks, Minn.	Dec. 8
Dec. 9.	School building,	Boston, Mass.	Dec. 8
Dec. 9.	Pipe sewers,	Detroit, Mich.	Dec. 8
Dec. 9.	Pipe sewers,	East St. Louis, Ill.	Dec. 8
Dec. 9.	Laundry machinery,	Boston, Mass.	Dec. 1
Dec. 9.	Bridge work,	Fort Scott, Kan.	Dec. 1
Dec. 9.	Bridge work,	Minneapolis, Minn.	Dec. 1
Dec. 9.	Removal snow,	New York, N. Y.	Dec. 1
Dec. 9.	Fire hose,	Buffalo, N. Y.	Nov. 24
Dec. 10.	Intercepting sewers,	Washington, D. C.	Nov. 4
	Advertised, Engineering News, Nov. 3.		
Dec. 10.	Crane (100 tons capacity),	Brooklyn, N.Y.	Nov. 10
Dec. 10.	Sterilizing apparatus,	New Haven, Conn.	Dec. 1
Dec. 10.	Storehouse,	New York, N. Y.	Dec. 1
Dec. 10.	Bridge,	Independence, Ky.	Dec. 8
Dec. 12.	Hospital building,	Bridgeton, N. J.	Dec. 1
Dec. 12.	Armor plate plant,	St. Petersburg, Russia.	Dec. 1
	Advertised, Engineering News, Dec. 1.		
Dec. 12.	Extending water-works,	Orange, N. J.	Dec. 1
	Advertised, Engineering News, Dec. 1.		
Dec. 12.	Sewers (5,400 ft.),	Little Rock, Ark.	Dec. 1
Dec. 12.	Water bond,	Reno, Nev.	Dec. 1
Dec. 12.	Paving, curbing, etc.,	Dayton, O.	Nov. 17
Dec. 12.	Boilers for dredges,	Honolulu, H. I.	Nov. 24
Dec. 12.	Levee work,	New Orleans, La.	Dec. 8
Dec. 12.	Heater, etc.,	Boston, Mass.	Dec. 8
Dec. 12.	Plumbing,	Washington, D. C.	Dec. 8
Dec. 13.	Power plant,	Boston, Mass.	Dec. 8
Dec. 13.	Paving,	Buffalo, N. Y.	Dec. 8
Dec. 13.	Grading,	Pittsburg, Pa.	Dec. 8
Dec. 13.	Electric lighting,	Middleport, N. Y.	Dec. 8
	Advertised, Engineering News, Dec. 8.		
Dec. 13.	School building,	Washington, D. C.	Nov. 24
Dec. 13.	Purchase of power franchise,	Stockton, Cal.	Nov. 24
Dec. 13.	Pier and tunnel,	Philadelphia, Pa.	Dec. 1
Dec. 13.	Hospital building,	Brooklyn, N. Y.	Dec. 1
Dec. 13.	Sewer bonds, ($10,000),	Independence, Mo.	Dec. 1
Dec. 13.	Sewers, etc.,	Philadelphia, Pa.	Dec. 1
Dec. 13.	Bridge work,	Philadelphia, Pa.	Dec. 1
Dec. 14.	Gravel roads (19 miles),	Brazil, Ind.	Dec. 1
Dec. 14.	Water pipe, hydrants, etc.,	Vancouver, B.C.	Dec. 1
Dec. 14.	Fire apparatus,	New York.	Dec. 8
Dec. 15.	Bridges (9) and viaduct,	Valatie, N. Y.	Dec. 1
	Advertised, Eng. News, Dec. 1 and 8.		
Dec. 15.	Dikes, etc.,	Portland, Ore.	Dec. 8
Dec. 15.	Electric lighting,	Sherbrooke, Que.	Dec. 8
Dec. 15.	Grading, paving, etc.,	Pittsburg, Pa.	Dec. 8
Dec. 15.	Paving (3 streets),	Beaumont, Tex.	Dec. 1
Dec. 15.	Court house,	Garner, Ia.	Dec. 1
Dec. 15.	Steam heating,	Flandreau, S. Dak.	Dec. 1
Dec. 15.	Railway work,	New York, N. Y.	Dec. 1
	Advertised, Eng. News, Dec. 1 and 8.		
Dec. 15.	Water-works,	Somerville, Tenn.	Dec. 1
	Advertised, Engineering News, Dec. 1.		
Dec. 15.	Electric plant,	Somerville, Tenn.	Dec. 1
	Advertised, Engineering News, Dec. 1.		
Dec. 15.	Brick paving,	Jacksonville, Fla.	Dec. 1
Dec. 15.	Church building,	Webster City, Ia.	Nov. 24
Dec. 15.	Storm sewers,	Denver, Colo.	Dec. 15
Dec. 16.	Light bonds,	Little Falls, Minn.	Dec. 8
Dec. 16.	Piles, planks, etc.,	New York.	Dec. 8
Dec. 16.	Paving, sewers, etc.,	Mendvine, Pa.	Dec. 8
	Advertised, Engineering News, Dec. 8.		
Dec. 16.	Water-bonds,	Little Falls, Minn.	Dec. 8
Dec. 17.	Electric plants, etc.,	Brooklyn, N. Y.	Dec. 8
Dec. 17.	Macadam roads (20 miles),	Crown Point, Ind.	Nov. 24
	Advertised, Engineering News, Nov. 24.		
Dec. 17.	Heating, ventilating, etc.,	Cincinnati, O.	Dec. 1
Dec. 19.	Asphalt or brick paving,	Hamilton, O.	Dec. 1
Dec. 19.	Tunnel sewer,	Newburg, N. Y.	Nov. 17
	Advertised, Eng. News, Nov. 17 and 24.		
Dec. 19.	Paving bonds,	Lima, O.	Dec. 8
Dec. 19.	Reformatory building,	Lexington, Ky.	Dec. 8
Dec. 20.	Water pump,	Dunkirk, N. Y.	Dec. 8
	Advertised, Eng. News, Dec. 8 and 16.		
Dec. 20.	Electric plant,	Royal Oak, Mich.	Dec. 8
Dec. 20.	Revetments,	Keweenaw Point, Mich.	Nov. 24
	Advertised, Eng. News, Nov. 24 to Dec. 15.		
Dec. 20.	Electric plant,	Mount Pleasant, Mich.	Dec. 1
Dec. 20.	Macadamizing,	Cincinnati, O.	Dec. 1
Dec. 21.	Street work,	Hoboken, N. J.	Dec. 1
Dec. 21.	Glass for electric lamps,	Cleveland, O.	Dec. 1
Dec. 21.	Court house annex,	Atlanta, Ga.	Nov. 3
Dec. 21.	Bridge,	Charlottetown, P. E. I.	Dec. 8
Dec. 22.	Brick paving, etc.,	Jacksonville, Fla.	Dec. 8
	Advertised, Engineering News, Dec. 8.		
Dec. 22.	Bridge superstructure,	Lorain, O.	Nov. 10
	Advertised, Eng. News, Nov. 10 and 17.		
Dec. 23.	Light station,	Tompkinsville, (S.I.), N. Y.	Nov. 17
	Advertised, Eng. News, Nov. 17 and 24.		
Dec. 23.	Cement and seawall,	Fort Morgan, Ala.	Dec. 1
	Advertised, Eng. News, Dec. 1 to 22.		
Dec. 23.	Auditorium,	Charleston, S. C.	Dec. 8
Dec. 26.	Electric lighting,	Waterloo, N. Y.	Dec. 8
	Advertised, Engineering News, Dec. 8.		

Dec. 26. Pipe sewers, South Bend, Ind. ..... Dec. 8
Dec. 27. Electric plant, Woodsfield, O. ..... Dec. 8
Dec. 28. Steel bridge, Norfolk, Va. ..... Dec. 1
Advertised, Eng. News, Dec. 1 to 15.
Dec. 28. Railway bridge, Chicago, Ill. ..... Nov. 24
Advertised, Engineering News, Nov. 24.
Dec. 29. Street bonds, Georgetown, Ky. ..... Dec. 8
Dec. 30. Sewers, East Cleveland, O. ..... Dec. 8
Dec. 31. Plans for station, etc., Stockholm, Sweden. June 23
Jan. 1. City hall plans, Bridgeport, Conn. ..... Aug. 18
Jan. 1. Draw bridge, Cathlamet, Wash. ..... Nov. 17
Jan. 1. Water-works, Pasadena, Cal. ..... Nov 17
Jan. 1. Electric plant, Pasadena, Cal. ..... Dec. 1
Jan. 2. Bridge, Quebec, Que. ..... Sept. 20
Advertised, Eng. News, Sept. 29 and Oct. 6.
Jan. 2. Arc lighting, Vincennes, Ind. ..... Oct. 27
Jan. 2. Storm sewer, etc., Hamilton, O. ..... Dec. 8
Jan. 3. Water-works bonds, Gaffney, S. C. ..... Dec. 8
Jan. 3. Steel bridge, Brookhaven, Miss. ..... Nov. 24
Jan. 3. Water-works, Gaffney, S. C. ..... Dec. 1
Jan. 3. Bath plans, Albany, N. Y. ..... Dec. 8
Jan. 5. Macadam roads (17½ miles), Decatur, Ind. ..... Dec. 1
Jan. 6. Water-gas plant, Johannesburg, So. Africa. ..... Oct. 27
Jan. 6. Extension, electric plant, Johannesburg, S. Af. Oct. 27
Jan. 7. Gravel road, Valparaiso, Ind. ..... Dec. 8
Jan. 9. School building, Wilmington, Del. ..... Dec. 8
Jan. 9. Repairing curb, etc., Houston, Tex. ..... Nov. 24
Jan. 10. Capitol building, Phoenix, Ariz. ..... Dec. 1
Jan. 10. Sewer bonds ($50,000), Grass Valley, Cal. ..... Dec. 1
Jan. 14. Park work and plans, Philadelphia, Pa. ..... Nov. 17
Jan. 15. Sewers and drainage, Callao, Peru. ..... Dec. 1
Jan. 16. Sale of telephone franchise, Duluth, Minn. Dec. 8
Advertised, Eng. News, Dec. 8 to Jan. 12.
Jan. 24. Footway tunnel, London, England. ..... Nov. 10
Feb. 1. School building, Peoria, Ill. ..... Dec. 1
Feb. 2. Electric lighting, New Orleans, La. ..... Nov. 3
Feb. 7. Sale of canal, Annapolis, Md. ..... Dec. 1
Feb. 10. Jail building, Keyser, W. Va. ..... Sept. 20
Mar. 15. Electric railway (23 miles), Shanghai, China. Nov. 24
Advertised, Eng. News, Nov. 17 to Dec. 8.
Mar. 15. Purchase of water-works, Belem, Brazil ..... Dec. 1
Mar. 31. Telephone concession, Shanghai, China. ..... Nov. 24
Advertised, Eng. News, Nov. 17 to Dec. 8.
No date. Water pump, etc., Albuquerque, N. Mex. ..... Dec. 8

RAILWAYS.

BELLAIRE, ZANESVILLE & CINCINNATI.—J. K. Geddes, Receiver and Gen. Mgr., Zanesville, O., informs us that no arrangements have yet been completed for the standard gaging of this line between Woodsfield and Bellaire, O. There has been a project on foot for some time for making the whole line a standard gage system and for the building of some additional track for the purpose of developing the coal fields of southeastern Ohio, but probably nothing will be done in the matter until the coal situation in Ohio is considerably improved.

BLACK DIAMOND.—Sir Thomas Tancred, an engineer sent to this country by English capitalists, has completed his reconoissance of the route for this proposed railway from Columbus, O., to Port Royal, S. C., penetrating the coal fields of east Tennessee and Kentucky, and it is said that he will recommend that the line be built. We are further informed that Col. Albert E. Boone, Zanesville, O., the promoter of the project, will let contracts next January for the construction of the branch between Vincennes, Ind., and Cynthiana, Ky. A map of the proposed route, 822 miles in length, may be seen in the office of Engineering News, 220 Broadway, New York.

CHICAGO, IOWA & DAKOTA.—Reports state that this company will probably extend its lines in the spring. The route now contemplated is northwest from Alden, the present terminus, through Britt to Elmore, Minn., where the road taps the Chicago & Northwestern, which now operates the Chicago, Iowa & Dakota. This would give the Northwestern a shorter line to its main track at Tama by 20 or 40 miles than by the present route via Eagle Grove, Webster City and Jewell.

CHICAGO & NORTHEASTERN.—We are informed that this company has at present two lines under construction in western Iowa; one from Denison to Wall Lake, 26 miles, and the other from Moundamin to Odebolt, 55 miles. Surveys are also about completed for a line from Sac City to Rolfe, Ia. D. C. Dunlap, Engr. of Location and Construction; C. A. Lichty, Asst. Engr., both of Wall Lake, Ia.

COCHITI & RIO GRANDE.—This company is stated to have been organized for the purpose of building a line from Thornton, Colo., on the Atchison, Topeka & Santa Fe Ry., to the head of the Cochiti district. The establishment of refining and smelting works at Bland is also projected. H. Claussen is said to be interested.

COLOMBIA.—This company was incorporated in West Virginia, Nov. 28, with a capital stock of $6,000,000, of which $50 is paid in, to construct and operate a railway from Puerto Llevano to Bogota, Colombia. Principal place of business, Philadelphia, Pa. The inorporators are: Ed. M. Heermans, J. M. Caldwell, T. C. Hall, Wm. C. Leonard and H. H. Martin, all of Charleston, W. Va.

CUBA.—We are informed officially that the American Indies Co., associated with the Drake & Stratton Co., both of 100 Broadway, New York, has received a contract from the U. S. government for the construction of a wharf at Triscornio, on Havana Harbor, and of a line of railway from that place to a connection with a branch of the United Rys. of Cuba, at Matanzas, Cuba. The length of the line will be about 7 miles; near Havana it will be double-tracked, with a single track towards the eastern end. It is said that the work will be prosecuted as rapidly as possible. E. Sherman Gould, of Yonkers, N. Y., Engr. of American Indies Co.; Col. Frank J. Hecker, Ch. Bureau of Transportation, Washington.—Secretary of War Alger, in his annual report, recommends that a substantial railway, practically the whole length of Cuba, with branches, be built by the U. S. government; estimated cost, $20,000,000.

FARMINGTON & IRONDALE.—This company was incorporated in Missouri, Nov. 26, with a capital stock of $200,000, to build and operate a line of standard gage railway from Irondale, Washington county, to Farmington, St. Francois county, a distance of 20 miles. The incorporators are: H. J. Cantwell, William Carter, J. W. Evans, A. N. Sager and E. H. Wagner.

GULF, LOUISIANA & GREAT NORTHERN.—We are informed that a contract for the construction and equipment of this railway, in Louisiana, has been awarded to Wheeler & Boody, Westmoreland Bldg., 222 South Third Street, Philadelphia, Pa. The total length of line will be 270 miles, and it has been arranged by the contractors to commence work within the next three weeks. A force of at least 400 Italians will be put on the work, and this number increased from time to time, as required. Certain portions of the work will be sub-let upon a cash basis, all financial arrangements having been perfected. Joseph J. Waltz, Pres., Alexandria, La.

GULF & SHIP ISLAND.—The promoters of this railway are considering the advisability of putting 200 convicts to work during the winter months in order to assist in grading the gap on this line between Hattiesburg and Pontotoc, Miss. S. S. Bullis, Gen. Mgr., Gulfport, Miss.

IDAHO NORTHERN.—This company has been incorporated in Idaho, with a capital stock of $2,500,000, to build a railway from the mouth of Coeur d'Alene River, in Idaho, to the headwaters of Bear Gulch. The incorporators are, W. Thos. Hart, Weiser, Idaho; B. Robb, Portland, Ore.; J. Perrault and A. Eoff, of Boise, Idaho.

KENTUCKY.—The Southern Construction Co., of St. Louis, Mo., is reported to have made a proposition to the people of Bath county providing for the construction of a railway from Owingsville to Olympia, Ky., if $20,000 bonus be granted.—The construction of other lines is also said to be projected from Carrollton and from Cadiz, Ky., in which J. A. Donaldson, of Carrollton, and J. G. Terry, of Cadiz, are said to be interested, respectively.

MINNEAPOLIS RY. TERMINAL.—This company has been incorporated, with a capital stock of $100,000, to construct a railway starting from 10th Ave. and Camden Place. The incorporators are: John S. Pillsbury, Pres. of Minneapolis Eastern Ry. Co.; Mart B. Koon, of Minneapolis, St. Paul & Sault Ste. Marie Ry. Co., both of Minneapolis, Minn.; W. D. Washburn, Curtis H. Pettit and Wm. D. Hale.

MOORE COUNTY & WESTERN.—W. B. Eckhout, Supt. of Construction, Aberdeen, N. C., informs us that the surveys have been completed and location made for 40 miles on this proposed line from Aberdeen to Concord, N. C., a distance of 85 miles. Part of the necessary capital has been secured, and part of the work let to J. R. Erwin & Co. and W. P. Neal Co. About 14 miles have been built and 9 miles graded. George M. Clarke, Vice-Pres., P. O. Box 836, Providence, R. I.; H. L. Thurston, Ch. Engr., Aberdeen, N. C.

NELSON & BEDLINGTON.—Press reports state that Foley Bros., Larson & Halverson, have received the contract for the construction of this proposed railway from Bonner's Ferry, Idaho, to Bedlington, on Lake Kootenay, B. C., a distance of about 53 miles. P. Foley, Pres., of St. Paul, Minn., is quoted as saying that surveys have all been made, and that a camp will be established at Bonner's Ferry and another near Kushanook, and work be commenced at once; there is considerable heavy rock work on the line.

NEW YORK & PENNSYLVANIA.—Reports state that Theodore Cobb, Spring Mills, N. Y., has been awarded the contract to build the 6-mile extension of this line from Oswayo to Millport, N. Y., at the rate of $10,000 a mile, the road to be built before Jan. 1. More than one-half of the work had been done before the signing of the contract.

NICARAGUA.—Press reports state that the Atlas Steamship Co., of Liverpool, has withdrawn its negotiations for the purchase of the control of this country's railway and steamboat line.

NORTH SHORE TERMINAL.—This company was incorporated in Pennsylvania, Nov. 30, with a capital stock of $100,000, to construct five miles of steam railway in Allegheny, Pa., to a connection with the Pittsburg, Fort Wayne & Chicago R. R. and the Pittsburg & Western R. R. Chas. T. Schoen, Pres., Bryn Mawr, Pa.; F. N. Hoffstat, Allegheny, Pa.; E. A. Schoen, Sewickley, Pa.; W. H. Schoen, Jr., and Geo. T. Hildebrand, both of Pittsburg, Pa.

OGDENSBURG & LAKE CHAMPLAIN.—This company was incorporated in New York, Dec. 1, with a capital stock of $4,400,000. It is a reorganization of the old Ogdensburg & Lake Champlain R. R. Co., whose line runs from Ogdensburg to Rouse's Point, N. Y. The directors are: Frank R. Becker, Ogdensburg; William A. Heady, Elmsford, N. Y.; William H. Platt, Brooklyn, N. Y., and Charles Parsons, George Parsons, George Sherman, Clarence S. Day, Charles G. Burnham and others, of 15 Broad St., New York.

PECOS VALLEY & NORTHEASTERN.—Work is now said to be proceeding slowly on the extension of this line from Roswell, N. Mex., to Amarillo, near Texline, on the Texas line of the Colorado & Southern, as the Union Pacific, Denver & Gulf Ry. will be called. The total distance is 208 miles, and track has been laid about to the boundary line between New Mexico and Texas. It is expected that all the work will be completed by Jan. 1.

PENNSYLVANIA.—Press reports state that Drake & Stratton, Pittsburg, Pa., have received the contract for building an additional track and removing a curve east of Kinzers, near Harrisburg, Pa., at $212,000. Also that contracts have been let for laying a new track from half a mile west of Elizabethtown and extending 4¼ miles east of the place, and for building a new track and roadbed from Johnstown bridge to Sheridan, and relaying track and removing curves between Sang Hollow and Conemaugh. Work will be commenced at once. W. H. Brown, Ch. Engr., Philadelphia, Pa.

PENSACOLA & NORTHWESTERN.—The city council of Pensacola, Fla., has granted a franchise to this company to construct a railway over certain streets of Pensacola. Mayor Northrup may be addressed.

RUTLAND-CANADIAN.—H. G. Smith, Treas., Rutland, Vt., informs us that the surveys have not yet been completed for this proposed line from Burlington, Vt., to the Canadian line; nor has the route been positively decided upon. Frank R. Wilk, Pres., Burlington; John W. Burke, Ch. Engr., Rutland, Vt. The Champlain Construction Co. has been incorporated to build the line, the incorporators being W. Seward Webb, Shelburne, Vt.; Edgar Harding and G. H. Bull, of Boston; P. W. Clement and H. G. Smith, of Rutland.

ST. LAWRENCE RIVER & ADIRONDACK.—H. G. Atwater, Secy., Norfolk, N. Y., informs us that the organization of this company has not been perfected, and that there is no certainty about the matter as yet.

TERRE HAUTE & LOGANSPORT.—This company was incorporated in Indiana, Nov. 30, with a capital stock of $2,000,000, to operate the lines formerly in the hands of a receiver. James McCrea and J. T. Brooks, of the Pennsylvania Co., Pittsburg, Pa., are among the directors of the new company.

WASHINGTON RUN.—Bennett & Talbott, Greensburg, Pa., inform us that they expected to start work Dec. 6 on this 5¼-mile line from Perryopolis to Layton, Pa., for the Washington Coal & Coke Co. The contract includes grading, tunneling, bridging, track laying, ballasting and furnishing of ties. P. J. Cochran, Pres., Dawson, Pa.; E. J. Taylor, Ch. Engr., McKeesport, Pa.

WISCONSIN CENTRAL.—H. F. Whitcomb, Gen. Mgr., Milwaukee, Wis., informs us that this company has recently purchased 1,000 box, 250 flat and 100 furniture cars.

STREET AND ELECTRIC RAILWAYS.

BELLOWS FALLS, VT.—Surveys are being made, according to reports, for the proposed Bellows Falls & Saxton's River Electric Ry., from Bellows Falls to Rockingham, via Westminster, a distance of six miles. J. H Holton, Pres., Burlington, Vt.; V. K. Nash, Ch. Engr., Woonsocket, R. I.

SWANTON, VT.—An act has passed the state legislature incorporating the Swanton Electric Ry. Co.

COHASSET, MASS.—Reports state that it has been decided to extend the third-rail electric system on the New York, New Haven & Hartford R. R. as far as Cohasset on the Plymouth Division. Chas. P. Clark, Pres., New Haven, Conn.

WARE, MASS.—The selectmen have granted a franchise to the Palmer & Monson St. Ry. Co., which provides for the construction of the line from Palmer before Jan. 1.

WINTHROP, MASS.—The Winthrop & Revere St. R. R. Co. has been organized to operate about eight miles of lines in Revere, Winthrop and East Boston. The directors are: J. O. Wetherbee, S. B. Pearmain and S. B. Hinckley, Jr., of Boston; S. B. Hinckley, Newton; W. M. Bacon, Winthrop; Geo. S. Forbush, Brookline, Mass.; Thomas Martin, Chelsea, Mass.

BUFFALO, N. Y.—The Buffalo & Lockport Electric Ry. Co., which recently acquired the Buffalo, Kenmore & Tonawanda line, is said to be negotiating to secure a franchise which will enable it to build another track along Delaware St., Tonawanda, from the North Tonawanda city line to the Buffalo city line. As it is the expressed intention of the company to run the Lockport cars over this line, a double-track system will be a necessity.

LOWVILLE, N. Y.—The people of this place contemplate the construction of an electric railway to nearby villages, taking power from the Westmore Electric Co., and also the erection of a new opera house.

NEW ROCHELLE, N. Y.—The village trustees, Dec. 5, granted franchises to the Westchester Electric Ry. Co. to build on Main St. and Winyah Ave., work to be completed by May 15.

OSWEGO, N. Y.—Press reports state that the Oswego Electric St. Ry. will be sold on foreclosure about Jan. 11.

PARIS, N. Y.—It is announced that Michael Gaffney, Comr. of Highways, Town of Paris, has granted a franchise to the Sauquoit Valley Electric St. Ry. Co.

ROME, N. Y.—We are informed that the right of way has been obtained for the Utica Suburban branch of the Utica Belt Line St. R. R., from Rome to Oriskany, nine miles, and that a start was made to grade when work was stopped by an injunction. As soon as injunction has been decided, work will be continued. John W. Boyle, Pres., of Utica, should be addressed; F. K. Baxter, Ch. Engr., Utica.

HAMMONTON, N. J.—The council is considering the petition of W. I. Garrison, Smith Conover and Samuel Riley and others, of Atlantic City, N. J., for a franchise to build through this town in connection with the proposed line between Camden and Atlantic City.

ALLENTOWN, PA.—The Allentown & Slatington St. Ry. Co. was incorporated in Pennsylvania, Dec. 2, with a capital stock of $200,000, to construct an electric street railway between Allentown and Slatington, a distance of 17 miles. The incorporators are: Francis J. Crilly, Pres.; John L. Schwartz, P. F. Cannon and Walter J. Saeger, all of Allentown; Francis A. Krutz, of Slatington.

EAST PITTSBURG, PA.—The Wilkinsburg & East Pittsburg St. Ry. Co.'s ordinance, asking for right of way over certain streets of East Pittsburg borough, was passed at a special meeting of the council Dec. 3.

ERIE, PA.—The select council has recently passed four ordinances providing for street railway extensions in this city.

PHILADELPHIA, PA.—Reports state that the Central Electric Ry. Co., of Philadelphia and Delaware county, has filed a resolution of the company in Media, providing for an extension of its line to Philadelphia, via Yeadon, Cardington, Lansdowne, Media, etc.

WILMINGTON, DEL.—Work is said to be progressing on the Wilmington & Chester Traction Co.'s new line between Wilmington and Chester, Pa., which, when completed, will connect with the line from Darby to Chester, and thus provide a continuous route between Wilmington and Philadelphia. Operations will probably begin about Jan. 1. C. M. Clark, Pres., Philadelphia.

BALTIMORE, MD.—The Baltimore Consolidated Ry. Co. has had ordinances introduced into the council asking for a franchise to build a double-track line on Chase and Bond Sts. and Hopkins and Ashland Aves. W. A. House, Mgr.

HAMPTON, VA.—This town has granted a franchise to the Peninsula Ry. Co. John G. Livezy, of Newport News, Va.; and Francis F. Causey, of Hampton, are interested.

DAHLONEGA, GA.—J. W. Adams, Pres. of Dahlonega Gold Mining Co., and J. H. Smith, Findlay, O., are said to be interested in the construction of an electric line from the company's mines to the Southern Ry.

KEY WEST, FLA.—The board of aldermen has granted a franchise to the Messrs. Laflin, according to reports, for the construction of an electric railway and electric light plant.

GADSDEN, TENN.—J. M. Elliott, Jr., Pres. Gadsden, informs us that complete arrangements have been made to convert the Gadsden & Attala Union Ry. into an electric line, 11 miles in length. Work will be done by W. S. McCall, Chattanooga, Tenn.

CARROLLTON, KY.—It is reported that the Carrollton Electric Ry. and Bridge Co. has been organized, and has had surveys made for the construction of an electric railway from Carrollton to Warsaw requiring a new bridge over the Kentucky River. M. J. Barker, Pres.

CLEVELAND, O.—J. J. Stanley, Mgr. of Cleveland Electric Ry., is said to have stated that this company contemplates the erection of an addition to its power house on Cedar St., and the installation of a new 3,800 HP. generator.

BATTLE CREEK, MICH.—George W. Bullis, Ann Arbor, Mich., is promoting a project to build an electric line between this city and Hastings next spring. Mr. Bullis is said to represent Boston capitalists.

BIRMINGHAM, MICH.—Almeron Whitehead, Frank Hagerman, George E. Daines, of this place; George T. Hendrie, of Detroit, and Michael F. Lillis, of Pontiac, were granted a franchise, Nov. 28, by the township board to build and operate an electric railway from Circle, 2¼ miles north of Birmingham, through the township of Bloomfield. The route, when finished, will reach Orchard Lake, and cars are to be running within 18 months from the time the franchise was granted.

FLINT, MICH.—R. M. Luton, Grand Rapids, Mich., is interested in the construction of an electric line between Flint and Long Lake.

LAKE BLUFF, ILL.—The Chicago & Fox Lake Electric Ry. Co., which contemplates building a cross-country line from Fox Lake to the lake shore, was granted a 20-year franchise for a right of way into Lake Bluff by the village board, Nov. 28. The company wanted a 50-year franchise in Scranton Ave., but this was not granted.

OREGON, ILL.—Fred S. Jones, of Oregon, contemplates the construction of an electric railway between Oregon and Rockford. Preliminary surveys have been made.

BARABOO, WIS.—The council, Nov. 25, granted a franchise to the Baraboo, Kilbourn & Devil's Lake Electric Ry. Co. Construction work is expected to begin next spring.

LONGVIEW, TEX.—It is reported that the Longview St. Ry. Co. contemplates the extension of its line. O. H. Methrin, Mgr.

ST. LOUIS, MO.—Chas. E. Carroll, Pres. of Mississippi Valley R. R. Co., St. Louis, informs us that this company is now having its prospectus written up, and expects to be ready for action about Feb. 1. Much work has been done in securing rights of way, and in making surveys. August Holthans, 1449 North 6th St., St. Louis.

ST. LOUIS, MO.—Press reports state that C. H. Spencer and others, of the Southern Electric Ry. Co., 4041 South Broadway, will become owners of the lines of the National Ry. Co., including 80.37 miles of electric and 14.67 miles of cable street railway.—It is also announced that the entire Lindell Ry. system, E. Whitaker, Pres., has been sold to a syndicate at $8,500,000. The company operates 60 miles of electric lines.

EUREKA SPRINGS, ARK.—The council is reported to have granted a franchise for the construction of an electric line in this city.

ASTORIA, ORE.—A 75-year street railway franchise is reported to have been awarded to Mr. Knettner.

REDLANDS, CAL.—It is reported that the horse car system in this city will soon be converted into an electric line. The railway is three miles in length, and the estimated cost is $35,000.

AURORA, ONT.—The Metropolitan St. Ry. Co., of Toronto, address Deer Park, Ont., has made arrangements with the York county council for the construction of an extension of the company's lines through Aurora.

HAMILTON, ONT.—It is reported that the Cataract Power Co. has asked Engineer Hillman to survey two direct lines to Guelph and Berlin for a fast electric railway service. The proposed line will run from a point on James St., to and along Burlington Heights, thence over the old canal, and will follow in some respects the original radial railway survey to the top of the Flamboro escarpment. No bonuses will be asked for, and the most direct lines will be used.

PARRY SOUND, ONT.—The board of trade is said to be interested in the construction of a line of electric railway, to connect Parry Sound and Depot Harbor.

VANCOUVER, B. C.—Press reports state that the British Columbia Electric Ry. Co. has decided to erect a new power house, with a 3,000-HP. generator. The construction of a branch along Davie St. to English Bay is also said to be projected. J. Buntzen, Mgr.

ELECTRIC LIGHT AND POWER.

BOSTON, MASS.—Bids are asked until Dec. 13 for a power plant for rope manufactory, two horizontal tubular boilers; also a quantity of iron pipe and specials, machine-set screws, files, leather belting, pipe fittings and valves. Edwin Stewart, Paymaster-General, U. S. N., Washington, D. C.

EVERETT, MASS.—P. D. Blackden, Mech. Engr., 170 Summer St., Boston, writes us that he has not yet received the franchise for a plant recently asked for, the matter still being in the hands of the city government. The plant will be operated by steam.

SOUTHBRIDGE, MASS.—Reports state that it is proposed to form a company to buy C. W. Weld's water privilege below Sandersdale, and utilize it for transmitting power to the center of the town. There is a fall of about 10 ft.

SPRINGFIELD, MASS.—The committee has instructed the United Electric Light Co. to replace 100 of the present open arc lights with enclosed ones. H. S. Anderson, Supt.

WINTHROP HEAD, MASS.—The Walworth Construction & Supply Co., 100 Pearl St., Boston, Mass., has been awarded the contract for the electric plant at the mortar battery at this place at $1,424.

EAST HARTFORD, CONN.—Jos. O. Goodwin, Town Clk., writes us that the town will probably let a contract for electric lighting to either a Hartford or a Manchester company. About 300 incandescent lights will be wanted by the fire district.

BROOKLYN, N. Y.—Bids are asked until Dec. 17 for building a new plant and for extending the old one at the New York navy yard, and also for enlarging the wiring system. M. T. Endicott, Ch. Bureau Yards and Docks, Navy Dept., Washington, D. C.

MIDDLEPORT, N. Y.—Bids are asked until Dec. 13 for furnishing about 25 arc lights of 2,000 c. p. each, for five years, as stated in our advertising columns. Thos. P. Hammond, Village Clk.

ROCHESTER, N. Y.—Mayor Warner is urging the council to consider the question of a municipal plant. The lights for this year cost the city about $230,000.

TUPPER LAKE, N. Y.—Press reports state that parties from Utica, N. Y., are considering the advisability of building a plant in this place.

WATERLOO, N. Y.—Bids are asked until Dec. 26 for electric lighting of the streets, for five years, as stated in our advertising columns. W. A. Gibson, Clk.; I. G. Gregory, Pres.

WILDWOOD, N. J.—Abraham Anderson, Camden, N. J., writes us that he purchased last November the property of the Seacoast Electric Light & Power Co. under foreclosure of mortgage. Mr. Anderson wishes to resell the plant for $10,000.

COATESVILLE, PA.—It is stated that the council has asked for bids for lighting the town with electricity for next year. If the contract is satisfactory a 5-year contract will be let.

LEBANON, PA.—Councils have retected the bids received for a 5-year contract. New bids for a shorter term will probably be asked.

PHILADELPHIA, PA.—The Southern Electric Light & Power Co. has increased its capital stock from $400,000 to $2,000,000 for the proposed extension to its plant. In addition to the company's contract with the city for the lighting of that section of the city lying south of South St., between the Delaware and Schuylkill rivers, it furnishes current to many large business and manufacturing enterprises for incandescent lights and power. At present the main power house, which was erected in 1895, is 204 × 174 ft., and is so constructed that it can be almost indefinitely extended without alteration of the work already done. The structure is of steel throughout, and the walls and chimney are of brick. The plant is located near the Schuylkill River. The supply of water, of which the company uses 12,000 gallons a minute for condensing purposes, is obtained through a round brick-and-stone conduit 48 ins. in diameter, which extends from the plant to the bottom of the river, a distance of 1,300 ft.

PITTSBURG, PA.—Local papers state that Capt. W. B. Rodgers, of the Tide Coal Co., has let the contract for a complete electric haulage plant to be put in his mines. The machinery will cost about $10,000.

CHESAPEAKE BEACH, MD.—We are informed that plans and specifications for a plant, water-works, sewers and an ice plant are being prepared by Geo. Cadogan Morgan, 808 Royal Insurance Bldg., Chicago, for the Chesapeake Beach Ry. Co. It is not known when the contracts will be let. Otto Mears, Pres., Washington, D. C.

HAGERSTOWN, MD.—The council has passed an ordinance providing for the construction of a municipal plant, to cost about $60,000.

LONACONING, MD.—The Lonaconing Electric Light & Power Co. has decided to extend its plant. Local papers state that there shall be required two 120-HP. engines, a boiler, two alternating dynamos of 2,000 voltage each, with the numerous fixings necessary to operate them. These will be purchased at once. Supt., H. Scott.

HINTON, W. VA.—Arrangements have been completed for the development of the water power of the Kanawha Falls, near Hinton, and the work is now progressing rapidly under the direction of John W. Hayes, of Petersburg, Va., who prepared the plans. The power is being developed by the Wilson Aluminum Co., 97 Cedar St., New York. Buildings will be erected and plants established for the manufacture of calcium carbide, for the making of acetylene gas. The falls have about 6,000 to 12,000 HP.

BRUNSWICK, GA.—W. F. Greene, Civil Engr. and Receiver, Brunswick Light & Water Co., writes us that all contracts for furnishing machinery for a new plant have been let. Estimated cost, $18,000. E. F. Baker, Des. Engr., 1601 North Calvert St., Baltimore, Md.

FORSYTH, GA.—W. A. Pye, Cy. Clk., writes us that it is not yet decided whether to have a plant or not.—A report states that this place voted Nov. 26 to issue bonds for electric lights.

GAINESVILLE, GA.—Jas. P. Edwards, Elec. Engr., Augusta, Ga., and Gainesville, writes us that the proposed plant will be as follows: Plant operated by water power, water-wheel 150-HP., under 9 ft. head wanted to furnish power to the municipal arc lighting plant at the shaft (without transmission); one generator, two-phase alternating 2,400 volts, 100 K-W. wanted; about 16 miles No. 5 B and S. weatherproof line wire wanted (probably part used bare instead of insulated); plant will supply light and power, and generator is expected to run 24 hours a day. Probability of using a storage battery for lighting purposes; in addition the present horse-car line wishes to use electricity if it can be secured cheaply enough.

SPARTANBURG, S. C.—J. T. Johnson and others, of Spartanburg, propose to build a water-power plant and several mills at Ware Shoals. The plant will furnish about 10,000 HP.

KEY WEST, FLA.—Messrs. Lafin have been granted a franchise to operate a plant and street railway.

RICHMOND, KY.—We are informed that a plant will be built for the Richmond Electric Light Co. at a cost of $15,000. The plant will have a Warren-Medbery alternator, 50 arc lamps, etc. The engines and boilers have not yet been purchased. D. J. Hauss, Elec. Engr., Pike Bldg., Cincinnati, O., and Frank Adair may be addressed.

CLEVELAND, O.—Director of Law Norton is reported to have stated that ordinances are being prepared to authorize the construction of underground conduits for the electric wires, etc.

ROCKFORD, O.—A. G. Stewart, one of the incorporators of the new electric company, writes us that bids will probably be asked in about two weeks for building the plant to have 800 incandescent lights. It is expected that the plant will be operated in connection with the water-works. There will be required an engine and dynamo, overhead wires, etc.

SPRINGFIELD, O.—It is stated that the Springfield Light & Power Co. will extend its plant at a cost of about $10,000. J. N. Waterman, Pres., Boston, Mass.

WOODSFIELD, O.—Bids are asked until Dec. 27 for constructing a plant, according to reports; estimated cost, $7,000. T. A. Way, Mayor.

GREENFIELD, IND.—John F. Egan, Mayor, writes us that the council has purchased the plant for $16,000.

FLAT ROCK, MICH.—This city is to have a plant, according to reports.

GROSSE POINTE, MICH.—The village of Grosse Pointe Farms, it is stated, has voted against issuing bonds for a plant.

ROYAL OAK, MICH.—Bids are asked until Dec. 20 for constructing a plant to cost $3,000. Gas engines will be used. It will have a capacity for furnishing 16 1,500-c. p. arc and 250 incandescent lights. Address Wm. Hilzinger, Main and First Sts., Royal Oak.

STURGIS, MICH.—Chas. A. Sturgis, Mayor, writes us that plans and specifications for a plant are not yet prepared. The plant will have a capacity for 100 to 125 arc and 1,500 16-c. p. incandescent lights. C. L. Hauer, Supt.

LINCOLN, ILL.—Arrangements are reported as being made for the construction of the plant for the Logan County Electric Light Co. The company has a capital stock of $10,000. John St. Cerny and Henry G. Harget, Pekin, Ill., and Adam Denger, Lincoln, are interested.

FOUNTAIN CITY, WIS.—H. & F. Roettiger have engaged A. M. Palitz, Milwaukee, Wis., as consulting engineer for the proposed plant. He will have charge of receiving bids. The city will be lighted by four arcs and 25 32 c. p. incandescent lights.

COUNCIL BLUFFS, IA.—The council has been asked to call an election to vote on the question of granting a 25-year franchise for a plant to the J. C. Hubinger Co., Keokuk, Ia.

WILLIAMSBURG, IA.—The council proposes to put in a plant, according to reports.

LITTLE FALLS, MINN.—Bids are asked until Dec. 16 for the purchase of $60,000 of 5% 20-year bonds for the proposed plant and water-works; population, 6,000. F. E. Hall, Cy. Clk.

INDEPENDENCE, MO.—H. B. Speechter, of Louisiana, Mo., is reported to have applied for a franchise to construct a $30,000 plant, and to operate it.

NORTHPORT, WASH.—W. R. Lee writes us that he has been granted a franchise. He was also awarded a 5-year contract for 10 arc lights. The plant will be operated by water power. No contracts will be let for some time.

ELGIN, ORE.—Reports state that a contract for a plant and water-works, to cost about $12,000, has been let.

INDEPENDENCE, ORE.—The committee has been instructed to purchase the L. C. Gilmore water power. It was also instructed to purchase the Independence electric light plant.

SAN PEDRO, CAL.—The city trustees have been asked to call an election to vote on the question of issuing $40,000 in bonds for a plant and water-works, and $20,000 for sewers.

PROVO, UTAH.—It is stated that the plant will be purchased by the council, and that it will be extended.

SHERBROOKE, QUE.—Bids are asked until Dec. 15 for lighting the streets with arc and incandescent lights. C. W. Cate, Chn. Com.

HAMILTON, ONT.—The Cataract Power Co. has submitted a proposition to furnish this city with electric lights. H. R. Leyden, Gen. Mgr.

INGERSOLL, ONT.—The council, it is stated, has appointed a committee to negotiate for the purchase of the plant of the Ingersoll Electric Power & Light Co.

VICTORIA, B. C.—Application will be made to the legislative assembly of the Province for an act to incorporate a company to construct, equip and operate a plant for the lighting by electricity of the townsites of Teslin Lake, Glenora, Telegraph Creek, and Atlin City, and also to erect and maintain telephone and telegraph lines, with all the necessary powers and privileges. Robert Cassidy is the solicitor for applicants.

NEW COMPANIES.—Huntingburg Light & Power Co., Huntingburg, Ind.; $4,500; C. S. Knight, M. L. Poehmus.

Newaygo Transmission Co., Newaygo, Mich.; $15,000; to furnish electric light and power; Alston Gerry, Jas. F. Barry, of New York city; J. E. More, Chas. F. Peke, Grand Rapids, Mich.

Corona Light & Water Co., Klamath Falls, Ore.; $100,000; S. C. Thayer, A. L. Leavitt, C. L. Parish.

Chemical Battery Light, Heat & Power Co., Pierre, S. Dak.; $5,000,000; Frank W. Lowery, E. O. L. Apes, E. L. Squire.

La Cigale Water & Power Co., Mercur, Utah; Martin Mahnken, Mercur.

East Chicago Light & Power Co., East Chicago, Ind.; $15,000; George W. Wilson, H. N. Haley, M. L. Pier.

Valley Electric Light Co., Valley Falls, N. Y.; $10,000; to furnish light in Lansingburgh, Melrose, Schaghticoke, Stillwater, Valley Falls, Johnsonville, Buskirk's Bridge and Eagle Bridge; Edward O'Neil, Hiland Carpenter, Augusta Carpenter, Valley Falls; Jonathan N. Carpenter, Hoosick Falls, N. Y.

Groton Electric Co., Groton, Conn.; $2,000.

Elmira Light, Heat & Power Co., Elmira, N. Y.; $10,000; James B. Rathbone, Elmira.

Sheridan Light & Water Co., Sheridan, Ind.; $9,500; H. C. Knight, M. L. Polhamus.

American Sun Light Co., New York; $10,000; J. L. Nisbet, Yonkers, N. Y.; R. H. Jaeger, R. H. Stearn, New York.

Clarendon Light & Heat Co., Clarendon, Ark.; $6,000; J. W. B. Robinson, Pres.; H. B. Bateman, Vice-Pres.; J. T. Jones, Secy. and Treas.

Red Lake Falls Electric Light Co., Red Lake Falls, Minn.; $8,000; Marcus Johnson, Atwater, Minn.; Anna B. Marshall, L. R. Smith, Red Lake Falls, Minn.

Rockford Electric Lighting Co., Rockford, O.; $6,000; C. S. Mauk, A. G. Stewart, D. C. Kuder, F. M. Kirby, J. D. Wagers, W. T. Palmer.

Carter-Hays Electric Co., Louisville, Ky.; $5,000; to manufacture and repair electric appliances and construct electric plants, etc.; E. W. Hays, Hugh Hays, L. D. Carter.

Bath Light & Power Co., Bath, Me.; $100,000, with $400 paid in; Pres., E. W. Hyde, Bath, Me.; Treas., H. H. McCarty, Bath, Me.

Millbrook Gas & Electric Co., Washington, N. Y.; $15,000; Wm. E. Smith, Millbrook; Richard J. Scoles, Samuel Thorn, New York.

Delaware Electric Light & Power Co., New York; $250,000; P. G. Stappens, D. McM. Niven, C. W. Phillips, New York.

Natchez Light, Power & Transit Co.; Natchez, Miss.; $200,000; Maurice Moses, Abram Moses, Natchez.

Eldora Resort & Power Co., Eldora, Colo.; $100,000; to build a summer resort, a power plant, etc., on the Paterson Lake property, Boulder county; T. B. Stuart, C. A. Murray, E. L. Alexander.

Crescent City Electric Co., New Orleans, La.; to build and operate a plant, the wires to be underground; Pres., Jos. H. DeGrange, Pres. Canal & Claiborne R. R. Co.; Secy. and Treas., Sidney H. March, of the Dock Comm.; Gen. Mgr., J. B. Craven.

Williamsport Water & Light Co., Williamsport, Ind.; $10,000; Jno. H. Brown, B. O. Mayer.

Citizens Electric Light & Water Co., Smithfield, Va.; $20,000; J. W. Holloway.

Hamburg Mining, Milling & Power Co., Washington, D. C.; $5,000,000, with $1,000 paid in; to develop the manufacturing, chemical, mining, milling interest of Huilota, Mex.; J. M. Wiley, H. O. Baker, W. T. Fitzgerald, D. Lester, H. Wasmuth, Washington.

Greenup Light Co., Greenup, Ky.; $5,000.

BRIDGES.

PLYMOUTH, MASS.—The board of selectmen is considering the question of replacing certain bridges destroyed by storms. Plans for a new iron bridge over Eel River, on Warren Ave., have been presented by Ernest Nickerson.

ALBANY, N. Y.—The Hudson River Bridge Co., New York, proposes to construct a new bridge to replace the present structure between Maiden Lane and East Albany, to cost about $500,000.

BINGHAMTON, N. Y.—Jerome De Witt, Mayor, informs us that no official action has been taken to construct the proposed bridge over the Susquehanna River.

BUFFALO, N. Y.—The grade crossing commission has in contemplation the construction of eight viaducts and ten subways. About two years will be required to complete these improvements, which will cost about $1,000,000.

SYRACUSE, N. Y.—Henry B. Seaman, New York, has been engaged to prepare plans and estimates for abolishing the grade crossings. Jas. K. McGuire, Mayor.

WATERVLIET, N. Y.—Reports state that the Hilton Bridge Co. has been awarded a contract for a new bridge over the canal on Broadway, near 23d St., to be constructed next spring.

ROSSIE, N. Y.—A bill has been introduced in the board of county supervisors, Ballston Spa, N. Y., to authorize this town to borrow $4,800 for the construction of an iron bridge.

LE ROY, N. Y.—A meeting of the town board and railway commissioners will be held Dec. 13, at the Buffalo, Rochester & Pittsburg Ry. station, to consider the question of constructing a highway bridge over the tracks at Haskin's Crossing.

HOOSICK FALLS, N. Y.—Reports state that plans and specifications for the abutments for the new bridge to be built at North Hoosick are on file with the town clerk.

CLIFTON, KY.—W. L. Cannon, Midway, Ky., writes us that a steel bridge will be constructed of one span, 100 or 110 ft. long, and 14 ft. wide; capacity, 100 lbs. per sq. ft. E. Thacker, Engr., 16 Savings Institute, Paterson, N. J.

INDEPENDENCE, KY.—Bids are asked until Dec. 10 for furnishing plans and constructing a bridge of two spans, 48 ft. each, capacity 150 lbs. per sq. ft., over Cruises Creek. Address Eugene Mann, Piner, Ky., or W. T. Loomis, Staffordsburg, Ky.

HARRISON, O.—It is proposed to construct a new bridge between Hamilton county, O., and Dearborn county, Ind.

MOLINE, ILL.—J. G. Wagner Co., of the Milwaukee Bridge & Iron Works, Milwaukee, Wis., was awarded a contract, Nov. 30, by Maj. W. L. Marshall, U. S. Engr., Chicago, for the construction of a high bridge over Rock Creek, to cost about $25,000.

EAST GRAND FORKS, MINN.—Bids are asked until 8 p. m., Dec. 9, for widening the approach to the De Mers Ave. bridge. Henry Harm, Cy. Recorder.

CORSICANA, TEX.—The county commissioners have awarded a contract to Mr. Flynn, Weatherford, Tex., at $1,500, for two iron bridges over Post Oak Creek.

SPOKANE, WASH.—The Washington St. bridge has been condemned by the board of public works. A new structure will probably have to be constructed.

YUMA, ARIZ.—The citizens are considering the question of having an addition to the new Southern Pacific Ry. bridge, for wagons, to cost from $10,000 to $15,000.

FRESNO, CAL.—The county supervisors have awarded a contract to the California Bridge & Construction Co., at $8,770, for the construction of a bridge over Kings River, near Sanger.

NAPA, CAL.—Newman & Wing have been awarded a contract, at $2,600, for the construction of a stone bridge across Fagan Creek. N. W. Collins, Clk. Bd. Supervisors.

CHARLOTTETOWN, P. E. I.—Bids are asked until Dec. 21 for constructing a bridge at Alberry Plains, according to reports. Richard Smith, Secy. Bd. Pub. Wks.

BUILDINGS.

BOSTON, MASS.—Bids are asked until Dec. 9 for erecting a grammar school building on Quincy and Perth Sts., Dorchester, for the city of Boston; bond, $20,000. Wm. T. Eaton, Chn. of Com.; A. Warren Gould, Arch., 2A Beacon St.

BOSTON, MASS.—Bids are asked until Dec. 12 for a feed-water heater, meters, etc., for the pumping station, Calf Pasture, Dorchester District. Benj. W. Wells, Supt. Sts.

CAMBRIDGE, MASS.—A new $50,000 infirmary building is to be erected here for Harvard University. James Stillman, 7 East 40th St., New York, is the donor.

PAWTUCKET, R. I.—Cram, Goodhue & Ferguson, of Boston, are stated to have been chosen as architects for the new public library building to be erected in this city; cost, between $100,000 and $200,000.

DANBURY, CONN.—D'Esope Bros., Hartford, Conn., were the lowest bidders, Nov. 30, for erecting a court house for Fairfield county in this city, at $35,649. Other bidders were: Tracy Bros., Waterbury, Conn.; Casey & Hurley, Bridgeport, Conn.; C. C. Crossley, Danbury; J. L. Bunnell, Danbury; Dowling & Bottomley, Bridgeport; Foster Bros., Danbury; Norcross Bros., Worcester, Mass.

MIDDLETOWN, CONN.—C. W. Page, Supt. of Hospital for the Insane, informs us that reports were premature stating that plans have been completed for additions to the buildings, to cost about $75,000. Recommendations have been made regarding the same, but no steps can be taken without the sanction of the state legislature.

ALBANY, N. Y.—Norcross Bros., Worcester, Mass., are reported to have been awarded the contract for erecting the new union station in this city, on the site of the old Delavan House, to cost about $400,000.

ALBANY, N. Y.—Plans are asked until Jan. 3 for a public bath house in this city. Horace Andrews, Cy. Engr.

BUFFALO, N. Y.—Reports state that Mayer & Weil, who recently bought the Manhattan Hotel, at Main and Mohawk Sts., and who will replace it with a 7-story brick fireproof building of steel construction, have closed a contract with Charles Mosier to tear down the present building and to build the new structure.

NEW YORK, N. Y.—A fire in this city, Dec. 4, destroyed the 5-story building at Warren St. and Broadway, occupied by Rogers, Peet & Co., Clothiers. The loss to this and the Home Life Building, which is adjacent, is estimated at about $800,000.——The St. Agnes Roman Catholic Church, 43d St., near 3d Ave., was damaged by fire, Dec. 4, causing a reported loss of $75,000.——Reports state that Andrew Carnegie, of Pittsburg, will erect a large dwelling at 91st St. and 92d St. and 5th Ave.——The 2-story brick car-house, 150 × 250 ft., of the Union Ry. Co., at 173d St. and Boston Road, was damaged by fire, Nov. 30. Estimated loss, $150,000; insurance, $100,000.——Plans have been filed by Paul B. Pugh & Co., 674 Columbus Ave., for a 7-story brick flat building at 92d St. and Central Park West, to cost $120,000. G. A. Schellenger, Arch., 128 Broadway; by Friedman & Feinberg, for four 6-story brick flat and store buildings at 287 to 297 Elizabeth St., to cost $99,000; by C. B. Drew, 306 East 123d St., for a 7-story brick tenement building on 123d St., near 2d Ave., to cost $70,000. G. S. Drew, Jr., Arch.; by the New York Second Church of Christ Scientists, for a 4-story granite, marble and brick church building at Central Park West and 68th St., to cost $200,000. Frederic R. Comstock, Arch., 98 5th Ave.; by Mrs. Lottie Ratner, for eight 4-story brick flat buildings at 139th St. and St Ann's Ave., to cost $120,000. M. Bernstein, Arch., 145 Centre St.; by Lanrowitz & Fine, 307 East 74th St., for three 6-story brick flat buildings on Houston St., near Hancock St., to cost $84,000. G. Fred. Pelham, Arch., 503 5th Ave.; by Charles Wahlig,678 East 134th St., for six 4-story brick buildings on 135th St., near Brook Ave., to cost $150,000. E. Wenz, Arch. and Owner, 2377 3d Ave.; by L. F. J. Weiher, Jr., for three 5-story brick flat buildings on Washington Ave., near 164th St., to cost $68,000; by Bernheimer & Schmid, for a 4-story brick storage house on 107th St., near Columbus Ave., to cost $60,000. Louis Oberlin, Arch., 15 Whitehall St.——John Weber & Son are reported to have the general contract for erecting a 3-story brick warehouse and stable at 613 and 615 West 48th St. for the Pabst Brewing Co. Lyndon P. Smith, Arch., 258 Broadway.——The following bids were received by the supervising architect, Washington, D. C., Nov. 24, for taking down and rebuilding the west end wall of rear building of the Assay Office: John F. Johnson, New York, $11,700, time, 90 working days; Michael Moore, New York, $5,750, 50 working days; Joseph H. Cuttey, New York, $5,639, 30 working days; Quincy & Crawford, New York, $6,660, 9 weeks; Hartman & Hogan, New York, $4,887, 33 days.——The following bids were received, Nov. 28, by the supervising architect, for the extension of the mailing platform and shed of the post office building in this city:

		Time.
Cooper & Wigand, 1133 Broadway, N. Y.	$13,896	3½ mos.
Kenny & Kenny, Syracuse, N. Y.	12,304	4 "
Post & McCord, ft. Clay St., B'klyn, N.Y.	14,270	4 "
[1]Prince & Kinkel Iron Wks., New York..	16,637	4 "
Stacy B. Opdyke, Jr., Philadelphia, Pa..	12,235	4 "
Ryan & McFerran, 106 E. 23d St., N. Y.	14,949	4 "
W. G. Triest, 39 Cortlandt St., N. Y.	12,237	3 "
Kelley & Kelley, 220 Broadway, N. Y.	12,296	4 "
J. B. & J. M. Cornell, 143 Centre St., N.Y.	14,735	90 days.

[1]553 West 33d St.

LESTERSHIRE, N. Y.—This village, Nov. 29, voted to erect a new fire station and municipal building, to cost $24,000. M. S. Squires, Village Pres., informs us that architects are now submitting plans, but that no plan will probably be accepted before Dec. 10.

PORT CHESTER, N. Y.—It is reported that the board of education is arranging to submit to the voters at an early date a proposition to issue bonds for erecting a new high school building.

ROCHESTER, N. Y.—A fire in this city, Dec. 2, destroyed the Academy of Music; estimated loss, $80,000.

UTICA, N. Y.—It is reported that Jesse L. Oberdorfer, Mgr. of the Utica Opera House, has secured an option on the property at Blandina and Devereux Sts., until March 1, for the erection of a new theater building.

ATLANTIC CITY, N. J.—Plans are about completed for a new 5-story apartment house to be erected at Pacific and Kentucky Aves. for William Staiger; estimated cost, $30,000. Harold F. Adams, Arch.——Plans have been prepared for a 3-story brick and stone building apartment house, 40 × 100 ft., at New York and Atlantic Aves., for Bacharach & Sons. C. Hudson Vaughn, Arch.

CAMDEN, N. J.—A fire in this city, Nov. 29, damaged the store buildings at 216 to 220 Market St., causing a reported loss of $75,000; insurance, $70,000.

ALLEGHENY, PA.—It is reported that a new passenger station for the Buffalo, Rochester & Pittsburg R. R. Co. will be built early next year at Darragh, Balkam and Robinson Sts.; estimated cost, $150,000.

PITTSBURG, PA.—Plans are about completed, according to reports, for the erection of a new 14-story office building on the site of the Central Hotel, Smithfield St. and 2d Ave., for a syndicate of which I. P. Thurman, Allegheny, Pa., is president; estimated cost, $800,000. Chas. S. Bickel, 524 Penn Ave.——Plans have been prepared by Rutan & Russell, 111 4th Ave., and approved by E. M. Bigelow, Dir. of Dept. Pub. Wks., for an observatory at Highland Park. The tower will be constructed of rock-faced stone, will be 75 ft. high and will cost about $10,000. Work is to commence in the spring.——Bids are being received by Marlin & Co., Liberty Ave. and 24th St., according to reports, for erecting a steel shop building for their galvanized iron works.——Plans have been prepared by Alden & Harlow, Vandegrift Bldg., for the proposed addition to the Carnegie Institute, to cost about $750,000, work to begin in the spring. W. N. Frew, Chn. of Bd. of Trustees.

WILMINGTON, DEL.—Bids are asked by the board of education until Jan. 9 for erecting a new high school building on Delaware Ave. William Turner, Chn. of Com.

BALTIMORE, MD.—The council committee on education is considering the question of erecting a colored high school building on Pennsylvania Ave. Mayor Malster, and Henry F. New, Pres. of the School Bd.

WASHINGTON, D. C.—The following bids were received by the District Commissioners, Nov. 26, for the erection of an isolating building for minor contagious diseases on the grounds of Providence Hospital:

			Heat'g plant
Geo. W. Harrison	$29,650	$30,153	$3,400
Owen Donnelly	29,200	29,600	2,800
Andrew Gleeson	26,990	27,300	2,500
Meltar & Watts	26,538	27,000	2,800
Henry F. Getz	26,275	26,800	2,380
Richardson & Burgess	25,284	28,757	2,681
Chas. S. Dunham	25,573	26,512	2,350
Pavarini & Grul	24,824	24,900	2,840
W. E. Spier	22,217	22,430	.....

WASHINGTON, D. C.—Bids are asked by the district commissioners until Dec. 12 for reconstructing and replacing a portion of the plumbing of the Grant School building, on G St., near 21st St., N. W.

NEWPORT NEWS, VA.—Judge Sims and Winston Bros., of Louisa county, according to reports, will erect a 5-story opera house on Washington Ave., costing about $80,000.

NORFOLK, VA.—McIlvain, Unkefer & Co., Pittsburg, Pa., have been awarded the contract for erecting the new U. S. building in this city, at $162,966; time, 16 mos.

CHARLESTON, S. C.—Bids are asked until Dec. 23 for the erection of an auditorium at this place. Bond, $10,000. Frank P. Milburn, Arch., Charlotte, N. C.; Samuel Lapham, Chn. Auditorium Com.

ATLANTA, GA.—The U. S. government will erect a prison in this city, costing about $2,500,000, according to local papers.

BLUERIDGE, GA.—Andrew J. Bryan & Co., Atlanta, Ga., are reported to have completed plans for the proposed county courthouse, to cost about $35,000.

GAINESVILLE, GA.—This city will vote on the question of erecting a city hall.

LEXINGTON, KY.—Bids are asked until Dec. 19 for the erection of a temporary structure at the Kentucky State Houses of Reforms, near Lexington. Address Mrs. L. E. Yandell, Pres., 315 Broadway, Louisville, Ky.; Richards & McCarty, Archs., Columbus, O.

SHEPHERDSVILLE, KY.—The Fiscal Court of Bullitt county has decided to build a new court house at this place.

CINCINNATI, O.—The plans of Saml. Hannaford & Sons, for the Saengerfest building to be erected here, to cost $30,000, have been accepted. Gen. Andrew Hickenlooper, J. A. Firnstein, C. Krager, Chas. Kuhl, H. Methorfer, L. Kleybolte and Edmund K. Stalls, compose the building committee.

COLUMBUS, O.—The bids received for the changes to be made in the steam heating apparatus for the Sullivan school building were rejected. New bids will probably be asked.

TOLEDO, O.—Park Superintendent Moore is receiving bids for the construction of three steel greenhouses, 125 ft. long, according to reports.

FRANKTON, IND.—A fire, Dec. 5, destroyed the Commercial block in this city; reported loss, $100,000.

GREENSBURG, IND.—The contract for the erection of the building, to cost $40,000, for the Home for Old and Helpless Odd Fellows, will be let soon. C. C. Binkley, Richmond, Ind., and Judge M. A. Chapman, Anderson, Ind., may be addressed.

KOKOMO, IND.—Fire destroyed the old Milton B. Hopkins University; reported loss, $45,000; insurance, $11,000.

RUSHVILLE, IND.—The school board has recommended the construction of a new $40,000 high school building; also a $5,000 school building for colored children.

GRAND RAPIDS, MICH.—James K. Johnson contemplates the erection of a 6-story brick business block on Louis St.

CHICAGO, ILL.—M. G. McIntosh contemplates the erection of a 3-story and basement apartment house, 138 × 46 ft., to cost $35,000. O. W. Marble, Arch., 218 La Salle St.——Armour & Co. will erect a 7-story brick warehouse at Packer Ave. and 43d St., to cost about $100,000; and a one-story brick fertilizing house at Loomis and 45th St., costing $35,000.——Edw. H. Salsbury, according to reports, will erect a 2-story apartment house, to cost $65,000; two 4-story apartment houses, each costing $40,000.——William Blair will erect a 7-story business block, 73 × 173 ft., at Nos. 430-434 Wabash Ave., to cost $100,000.—The board of education is receiving bids for the erection of a 3-story and basement building, 191 × 91 ft., at 54th St. and Union Ave., to cost about $80,000.——Mrs. Mary Knauer will erect a 4-story and basement apartment house, 60 × 167 ft., to cost $70,000. Barfield & Hubbell, Archs., 87 Washington St.——The council will consider a plan for public markets. Alderman Nosak may be addressed.

EVANSTON, ILL.—The Masonic lodges of this city contemplate the erection of a 3-story building, 60 × 150 ft., on Davis and Maple Aves., to cost about $30,000.

KANKAKEE, ILL.—A 3-story and basement hotel, 100 × 85 ft., with an L 25 × 60 ft., costing $40,000, will be erected here. J. F. Fortin, Arch., 205 South May St., Chicago.

MOLINE, ILL.—The board of education has ordered that plans and specifications be prepared for a new 8-room brick school building to be erected here next summer.

CEDAR RAPIDS, IA.—The citizens of this city will vote on the question of issuing $125,000 in bonds for a city hall.

DES MOINES, IA.—Reports state that Norman Lichty and others contemplate the erection of a 7-story building at 6th and Walnut Sts., to cost about $125,000.

PARK RAPIDS, MINN.—Ferdinand Mueller, county auditor, informs us that the question of issuing the courthouse bonds was not voted upon at last election.

MILWAUKEE, WIS.—Reports state that Henry Herman, representing the North Lake Wisconsin Ice Co., has awarded George Mindeman the contract for the erection of 15 ice houses on the shore of North Lake, near the railway track. Each building will be about 80 ft. long, and the total cost about $35,000; work to be completed within 60 days.

LINCOLN, NEB.—A fire, Dec. 1, destroyed the main building of the Lincoln Normal University, a 4-story brick and stone structure, three miles from here. Reported loss, $100,000; insurance, $25,000.

THERESA, WIS.—John J. Fayel, late Supt. of the Holy Terror Mining Co., in his will gives $75,000 for a public library at this place, according to reports.

ST. LOUIS, MO.—The Second Presbyterian Church will erect a new structure, to cost $100,000, on Taylor Ave.——Isaac S. Taylor is preparing plans for a 7-story building, at Washington Ave. and 10th St., to cost $1,500,000.

SANTA BARBARA, CAL.—The citizens will vote Dec. 17 on the question of issuing $50,000 in school bonds.

DENVER, COLO.—The Walter Orpheum Co., of San Francisco, Cal., has been awarded the contract for erecting the new 5-story theatre building, at Arapahoe and 15th Sts. It will probably cost about $250,000.

ALBANY, ORE.—Bids are asked until Jan. 6 for labor and materials required in remodeling and improving a brick courthouse for Linn county, Albany. Frank Crabtree, County Clk.

SAN FRANCISCO, CAL.—The following bids were received at the Bureau of Yards and Docks, Navy Dept., Washington, for the construction of a shelter roof for boats at the Mare Island Navy Yard:

Ralston Iron Works, San Francisco	$13,490
Miller & Beck, San Francisco	13,939
Anderson & Grieg, San Francisco	11,825
James A. McMahon, San Francisco	13,250
Thomas Thompson, San Francisco	13,527
J. S. Van Winkle & Co., San Francisco	13,980
California Br. & Construction Co., Oakland, Cal.	14,790
Wm. P. Healy, San Francisco	11,997
New York Dredging Co., New York, N. Y.	12,142
Penn Bridge Co., Beaver Falls, Pa.	14,189

Also the following bids for the construction of a sawmill, boiler house and steel chimney at the same yard were received: Z. O. Field, San Francisco, $70,655; Penn Bridge Co., Beaver Falls, Pa., $71,764; New York Dredging Co., New York, $65,942; Wm. H. Healy, 97 Stewart St., San Francisco, $59,997; J. H. McKay, San Francisco, $72,308, $2,100 deducted by telegram; Anderson & Greig, 48 New Montgomery St., San Francisco, $68,625; F. A. Williams, San Francisco, $68,918; California Bridge & Construction Co., Oakland, Cal., $55,939; James A. McMahon, San Francisco, $66,450; W. H. Wickersham, San Francisco, $68,900.

TORONTO, ONT.—Bids are asked until Dec. 8 for the office fittings for the new city buildings. E. J. Lennox, Arch., King and Yonge Sts.; John Shaw (Mayor), Chn. Bd. Control.

WATER-WORKS.

AMESBURY, MASS.—E. R. Sibley, Treas. Power Hill Water Co., writes us that plans for a new reservoir involve the relocation of a portion of one of the streets, the company, therefore, will have to wait until the annual town meeting in March before arrangements can be completed.

HOLYOKE, MASS.—The commissioners have instructed Jas. L. Tighe, Engr. Water-Works, to prepare plans for a sand bed filtration plant for purifying the water of the Whiting St. reservoir. This reservoir has a capacity of 450,000,000 gallons. The greater part of the material, such as sand, gravel and stone, is in the immediate vicinity. Work will probably be begun in the early spring. Estimated cost, $25,000.

SPENCER, MASS.—The question of building a standpipe at a cost of $5,000 is being considered.

WATERTOWN, CONN.—B. H. Mattoon, Dir., writes us that the Watertown Water Co. was organized Nov. 26. It is probable that arrangements to let contracts will be completed to begin the construction in the spring. Population, 3,000. C. B. Mattoon, Pres.; E. W. Wheeler, Secy.

CLAYTON, N. Y.—An election was held Dec. 6 to vote again on the question of building works and a sewerage system. Plans for works were prepared in 1896 by Hinds & Bond, of Watertown, N. Y.; estimated cost, $50,000. Population (1890), 1,748. F. L. Hall, Pres. Village.

DUNKIRK, N. Y.—Bids are asked until Dec. 20 for furnishing and installing a pump of about 6,000,000 gallons capacity daily, as described in our advertising columns. Chas. E. Hequembourg, Comr.; Lucius Thompson, Supt.

LESTERSHIRE, N. Y.—This place voted Nov. 29 to issue $14,000 in bonds for a new pumping station; $24,000 for a city hall, etc. Bids for making these improvements will be asked in a short time. M. S. Squires, Village Pres.

NORTH TARRYTOWN, N. Y.—The Pocantico Waterworks Co. has been incorporated with a capital stock of $250,000, by Ralph Olmsted Ives, Henry R. Winthrop, Henry F. Miller and others, of New York. This is a reorganization of the old company, which has supplied this place with water since 1888.

STRYKERSVILLE, N. Y.—The Crystal Springs Water Co., of Buffalo, has been incorporated, with a capital stock of $5,000, by Dr. Frank P. Vandenbergh, Erie County Bank Bldg., Buffalo, N. Y., and others.

CHESTERTOWN, MD.—The commissioners are again considering the question of purchasing the works of the Chestertown Water Co., for $23,000.

CONNEAUTVILLE, PA.—An election will be held in February to vote on the question of issuing $10,000 in bonds for granting a franchise for works.

NORFOLK, VA.—J. Thomas Peelle, Registrar, writes us that the contract for a Jewell gravity filtration plant has been let to the New York Filter Mfg. Co., 26 Cortlandt St., New York, at $55,000, exclusive of building. The plant will have a capacity of 60,000,000 gallons a day.

SMITHFIELD, VA.—The Citizens' Electric Light & Water Co. has been incorporated, with a capital stock of $20,000, to build works and a plant at once. J. W. Holloway is interested.

PARKERSBURG, W. VA.—It is proposed to purchase 13,500 ft. of 4 and 6-in. water-pipe for the outer portion of the city. The cost, with laying, will be about $8,000.

GAFFNEY, S. C.—Bids are asked until Jan. 3 for the purchase of $18,000 of 40-year bonds, with privilege of redemption in 20 years. A. N. Wood writes us that the water supply will be taken from wells. At present no further information can be given. Population, 5,000. Frederick Minshall, Engr., Pocomoke, Md., and 150 Nassau St., New York.

BRUNSWICK, GA.—The works and light plant of the Brunswick Light & Water Co. will be extended, the contracts for furnishing the additional machinery having been let. W. F. Greene, Civil Engr. and Receiver.

MONTGOMERY, ALA.—Geo. A. Ellis, Consult. Engr., Springfield, Mass., writes us that the city has nearly completed about nine miles of extension on its distribution system; is proposing to add about four miles of large force main for the reinforcement of its present system; to add 12 new artesian wells with conduit lines to the present basins, which are to be covered; to replace the present pumping plant with two new 5,000,000-gallon pumps, together with almost entire reconstruction of its pumping station; the whole work is expected to cost about $175,000. Except the work on the extensions, which was contracted for last July, none of this work is yet under contract. J. W. Persons, Cy. Engr.; Fred Crosby, Supt.

COLUMBUS, MISS.—This city is reported to have voted Nov. 29 to issue $70,000 in bonds for improving the works and for building a sewerage system.

ALLIANCE, O.—Bids will soon be asked for the purchase of $80,000 of water bonds. Joe. McConnell, Cy. Clk.; O. W. Pfouts, Cy. Engr.

CLEVELAND, O.—The following bids were received by the board of control Nov. 25 for furnishing a new portable boiler and a pulsometer pump and carriage for the Division St. pumping station: Wm. Pattison Supply Co., $1,237; Erie City Iron Works, $775; River Machine & Boiler Co., $1,025; Kaltenback & Dress Co., $1,200. Bids were also opened for repairing and rebuilding No. 4 Worthington pumping engine at the Division St. station: Henry R. Worthington, $10,000, and the Snider-Hughes Co., $16,800. The bids on the latter work were about $10,000 lower than expected.

WILLIAMSPORT, IND.—The Williamsport Water & Light Co. has been incorporated, with a capital stock of $10,000, by John H. Brown, B. O. Mayer and Geo. Mayer.

BELLEVILLE, ILL.—We are informed that the Belleville Deep Well Water Co. is laying a few miles of small water pipe. The materials have been purchased for the extensions.

BOWEN, ILL.—W. C. McClure, Clk., writes us that this place voted a few months ago against building works. The only thing wanted is some hose for the hand engine. Population, 1,000.

WEST SUPERIOR, WIS.—W. H. Winslow, Secy. Superior Water, Light & Power Co., writes us that the company is carrying on several experiments in filtration, and has had Allen Hazen, 220 Broadway, New York, here to look over the ground for the purpose of making a report and recommendations.

ALLISON, IA.—A committee has been appointed to investigate the question of building works.

DUBUQUE, IA.—The Dubuque Water-Works Co. is enlarging its works by the addition of another artesian well, which is to be about 1,500 ft. in depth, and 10 ins. in diameter at the bottom. The contract has been let to L. Wilson, 53 Dearborn St., Chicago, Ill., who has already begun work on it.——Alderman P. W. Crawford writes us that no steps have yet been taken toward securing municipal works, except to serve notice on the company that after the expiration of six months from date of notice the city will proceed to purchase the works, and calling on the company to propose terms. The time expires in February.

LITTLE FALLS, MINN.—Bids are asked until Dec. 16 for the purchase of $60,000 of 5% bonds for the proposed works and electric light plant, plans and specifications for which will be prepared at once. F. E. Hall, Cy. Clk.

WAMEGO, KAN.—We are informed that the following bids were received Nov. 30 for the construction of waterworks, including 15,900 ft. of 4-in. mains, 6,168 ft. of 6-in. mains and 864 ft. of 8-in. mains; stand-pipe, 12 × 80 ft.; tubular well system; one compound duplex million-gallon pump; one simple duplex million-gallon pump; power-house; stack; two 60-HP. boilers, etc.:

	Expense outside of contract
Fairbanks, Morse & Co., Kansas City, Mo.*	$23,968
Moses & Heaton, Junction City, Kan.	26,010 $1,710
Cauldwell & Turner, Clyde, Kan.	25,117 1,710
W. W. Cook, Junction City, Kan.	23,925 1,710

*Irregular bid; bond issue, $25,000; all bids rejected; engineer's estimate, $26,200. H. V. Hinckley, Engr., P. O. Box 242, Topeka, Kan.; F. S. Haacke, Cy. Clk.

ENID, OKLA.—The question of building works is being considered. Jos. Meibergen, Mayor; R. Millard and H. C. Henry, are on the committee.

LINCOLN, NEB.—Ferdinand Bonstedt, Cy. Engr., writes us that the council was considering the question of replacing in the heart of the city several larger mains. Nothing will be done at present, the question having been indefinitely postponed.

McKINNEY, TEX.—J. M. Pierson, Mayor, writes us that the contract for building the works, complete, was let Nov. 30 to Kelley & Steele, Georgetown and Gainesville, Tex., at $26,235. The following are the other bids for the work, complete: C. W. Olcott, Dallas, Tex., $26,899, and P. J. German, Dallas, $26,544. There were other bids for portions of the work.

BONHAM, TEX.—The council has voted to spend $5,000 for extending the works, according to reports.

DENVER, COLO.—The aldermen have passed Supervisor Drake's resolution authorizing an election in April to vote on the question of municipal works.

FLORENCE, COLO.—Mitchell Bros., Denver, Colo., are reported to have submitted the lowest bids Nov. 28 for constructing works, at $120,000. The highest bidders were Holme & Allen, Denver, at $172,000. Hiram Phillips, Engr., Oriel Bldg., St. Louis, Mo.; P. T. McGuire, Mayor.

ALBUQUERQUE, N. MEX.—Bids are asked by E. A. Allen, Supt., U. S. Indian Service, Albuquerque, for furnishing a pump, tower, building, etc.

KETTLE FALLS, WASH.—An election will be held Dec. 28 to issue bonds for completing the works.

ELGIN, ORE.—Press reports state that this place has let contracts for building works and an electric light plant, to cost $12,000.

INDEPENDENCE, ORE.—The committee has been directed to purchase the works and electric plant owned by L. E. Gilmore.

SACRAMENTO, CAL.—The question of securing an increased water supply from the north fork of the American River at Auburn, is being considered. Estimated cost, $400,000. Mayor Land, Trustee McKay and City Surveyor Mulleney may be addressed.

SAN PEDRO, CAL.—The Chamber of Commerce has asked the town trustees to call an election to vote on the question of issuing $40,000 in bonds for works and a light plant.

HINTONBURG, ONT.—The council has adopted plans, estimates, etc., for works, to cost about $55,000. Chas. H. Keefer, Engr., The Rockliffe, Ottawa, Ont.; Reeve McLean and Councilman Merrill may be addressed.

INGERSOLL, ONT.—The council is reported to have appointed a committee to negotiate for the purchase of the works and electric light plant, owned by the Ingersoll Water-Works Co.

WATERLOO, ONT.—This place voted Nov. 21 against issuing $50,000 in bonds for the purchase of the works owned by Moffett, Hodgkins & Clarke, Syracuse, N. Y.

OSHAWA, ONT.—F. L. Fowke, Mayor, writes us that a by-law to issue $110,000 in bonds for works and a sewerage system will be voted upon about Jan. 20. The supply of water from a spring, eight miles distant, will be furnished by gravitation. Population, 4,300. John Galt, Des. Engr., Canada Life Bldg., Toronto, Ont.

IRRIGATION.

MONROE, LA.—J. C. Terry and L. P. Alexander contemplate the introduction of irrigation into Ouachita county.

BOZEMAN, MONT.—The West Gallatin Canal Co. has awarded a contract to Dean & Marlor for the construction of about 10 miles of irrigation canal.

HELENA, MONT.—A. Wormser, of Sweet Grass county, has been awarded the contract for the construction of two canals, one about 45 miles long, the other about 18 miles long to irrigate 52,600 acres of land at $12.50 an acre.

DENVER, COLO.—A plan is under consideration for the location of a reservoir on the south branch of the South Platte River, about 20 miles from Buffalo, Colo., to irrigate about 50,000 acres. John E. Field, State Engr., Denver, may be addressed.

CHEYENNE, WYO.—Ex-Senator Carey, Pres. Wyoming Developing Co., states that the company is arranging to build a reservoir to cost about $100,000, on the Laramie Plains, which will be used as a reserve water supply for the company's Wheatland colony lands. It is said that it will require the construction of 1,700 cu. yds. of masonry and concrete work, 100,000 yds. of rip-rap, 20,000 yds. of excavation and the placing of considerable piling.

FALL BROOK, CAL.—Reports state that the receiver of the Red Mountain ranch is preparing to construct dams and tunnels, to increase the water supply for irrigation, next season, to cost about $12,000.

SALINAS, CAL.—The Spreckels Sugar Co. has awarded a contract to W. W. Montague, San Francisco, for furnishing and constructing about 21,000 ft. of iron pipe line from 28 to 32 ins., for an irrigation system to cost about $150,000.

FILLMORE, UTAH.—Reports state that the state has awarded a contract to the Lake Bonneville Co. for the irrigation of about 217,000 acres. Work will probably not begin until about May 1.

KAMLOOPS, B. C.—The Thompson Valley Power Co. proposes to construct a dam, 450 ft. long and 25 ft. high, on Jamieson Creek, and a ditch 16 miles long and 4 ft. wide, from Jamieson Creek to Rogers Meadows, for irrigation, according to reports.

NEW COMPANIES.—Jennings Irrigation Co., Ltd., Crowley, La.; D. E. Sweet, Pres.; W. H. Simmons, Vice-Pres.; I. N. Pardee, Secy.; C. L. Pardee, Treas.; U. S. Phillips and P. B. Jones.

Cibola Canal Co., Yuma county, Arizona; to build a canal to irrigate 20,000 acres of land; C. O. McCarroll, M. Morris and E. G. Morris.

The Pine Ridge Ditch Co., Denver, Colo.; $1,600; to operate in La Plata county; Owen F. Boyle, S. W. McGuire, Joseph Coppinger.

SEWERAGE.

SOUTHBRIDGE, MASS.—M. S. Heath, of the committee, writes us that the town has appropriated the money for the proposed sewers. Nothing further has been done.

BUFFALO, N. Y.—The following bids were received by the Commissioners of public works Dec. 1, for constructing the proposed sewer in Van Rensselaer and Ainslie Sts.: Thomas F. Moore, $96,872; Brown, Stabell & Griffiths, $109,950; Henry Harter, $85,978; W. G. Smith, $96,898; Christopher Smith, $134,334; William Franklin, $101,614; Andrew Beaser, $74,974; John Harrer, $79,700; Ritzmann & Miller, $115,522; John Mumm, $93,657; George Dark and Thomas Dark, $120,500.

CLAYTON, N. Y.—The question of building a system and water-works was voted upon Dec. 6; estimated cost, $50,000. F. L. Hall, Pres., writes us that it will probably carry by a large majority.

NIAGARA FALLS, N. Y.—The board of public works has been petitioned to build certain sewers at a cost of about $42,000.

ROCHESTER, N. Y.—William Fuller has been awarded the contract for constructing 2,770 ft. of sewer on North St., at $10,555, and Thomas Holahan the contract for 1,110 ft. of sewer on Pearl and Meigs Sts., at $3,790.

STAPLETON (S. I.), N. Y.—The Richmond Borough Board has recommended to the New York city board of public improvements that $280,000 in bonds be issued for new sewers for that borough. H. P. Morrison, Deputy Comr. of Sewers, Richmond.

TUCKAHOE, N. Y.—The question of building sewers in this place is being considered.

WILKINSBURG, PA.—Bids are asked until 3 p. m. Dec. 8, for laying 1,200 ft. of 20 and 8-in. pipe sewers, and 4,600 sq. ft. of flagstone sidewalk. Frease & Spealing, Borough Engrs.

YORK, PA.—It is probable that councils will reject the proposition of the York Sewerage Co. to build a system, and will submit to the voters the question of issuing $250,000 in bonds for a municipal system.

CHESAPEAKE BEACH, MD.—George C. Morgan, 809 Royal Insurance Bldg., Chicago, is preparing plans and specifications for a system, water-works, etc., at this place for the Chesapeake Beach Ry. Co. Otto Mears, Pres., Washington, D. C.

COLUMBUS, MISS.—This place voted Nov. 29 to issue $70,000 in bonds for a system and for new water-works.

CHATTANOOGA, TENN.—The city has been asked by the board of trustees of the Erlanger Hospital to build a sewer for the hospital, at a cost of $1,500.

LOUISVILLE, KY.—The board of public works has decided to build a new sewer in 34th St., to cost about $260,000. Bids will probably soon be asked.

ALLIANCE, O.—O. W. Pfouts, Cy. Engr., is preparing plans for sewers in Ward No. 6. Jos. McConnell, Cy. Clk.

EAST CLEVELAND, O.—Bids are asked until Dec. 30 for constructing sewers in a number of streets. Walter P. Rice Engineering Co., Engrs., Society for Savings Bldg., Cleveland; H. B. Chapman, Clk.

HAMILTON, O.—The following submitted bids Nov. 25 for constructing sewers in 3d and 2d Sts., to cost about $7,000: S. E. Irwin, W. H. Louthan, of Hamilton; Sam Van Zant, Meder and Louis Drach, Cincinnati; Rolling & Cronin, Richmond, Ind.; Monger & Son, Dayton, O.

HAMILTON, O.—Bids are asked until Jan. 2 for constructing a storm sewer in 3d St., and also for the purchase of $8,200 in 4% bonds. L. A. Dillon, Cy. Engr.; M. O. Burns, Cy. Clk.

TOLEDO, O.—Plans for the construction of a sewer in the 31st district have been completed. Bids will probably soon be asked.

ELKHART, IND.—We are informed that D. F. Cordrey, Cy. Engr., has been directed to prepare plans for five miles of 24 to 12-in. pipe sewers. About $50,000 worth of brick paving will also be laid.

SOUTH BEND, IND.—Bids are asked until Dec. 26 for constructing pipe sewers in two streets. L. A. Hull, Cy. Clk.

DETROIT, MICH.—Bids are asked until Dec. 9 for furnishing labor and material, except cement and manhole covers, and building the vitrified pipe sewers in certain alleys, etc. D. W. H. Moreland, Pres. Bd. Pub. Wks.

MARSHALL, MICH.—H. E. Riggs, The Nasby, Toledo, O., has completed plans for a system for this place. Emil C. Sanchy, Cy. Recdr., informs us that nothing will be done until next year.

EAST ST. LOUIS, ILL.—Bids are asked until 12 o'clock noon, Dec. 9, for about 6,000 ft. of 24 to 6-in. pipe sewers, 25,000 brick in catchbasins and manholes, etc. M. M. Stephens, Mayor.

ST. PETER, MINN.—M. B. Haynes, Mankato, Minn., is preparing plans for a system for this place, to cost about $8,000. H. N. Benson, Cy. Clk.

MASON CITY, IA.—We are informed that the following bids were received Dec. 2 for constructing a main sewer: J. H. Killmer, Des Moines, Ia. (accepted), $23,900, sub drain, 68 cts. a foot; J. W. Gardiner, Mason City, Ia., $25,797, sub drain, $1.00; E. T. Webster, Dubuque, Ia., $29,200, sub drain, 75 cts., and O'Neil & Sons, Fairbault, Minn., $26,350, sub drain, 65 cts.

SIOUX CITY, IA.—It is proposed to lay about 2¼ miles of 8-in. pipe sewer from the manufacturing plants to the Missouri River, at a cost of $5,000.

ST. JOSEPH, MO.—The contracts with Gibson & Dunn for sewer work in two districts have been annulled, and the council, it is stated by local papers, will soon ask for new bids. Aldermen Hall and Finch may be addressed.

ST. LOUIS, MO.—B. H. Colby, Sewer Comr., has prepared plans for a brick sewer for North St. Louis. Local papers state that it will be over a mile long. The inside dimensions will be 24×18 ft. The side walls will be 6 ft. thick and the arch 2½ ft. The base will be 3 ft. thick, built of Portland cement and concrete brick. It will drain seven square miles of territory.

LONG BEACH, CAL.—Plans for a system, it is stated, are about completed; estimated cost, $25,000. Mayor Johnson may be addressed.

OAKLAND, CAL.—It is proposed to build sewers in that portion of the city known as Temescal.

OSHAWA, ONT.—F. L. Fowke, Mayor, writes us that this city will vote about Jan. 20 on the question of issuing $110,000 in bonds for a system and water-works. Population, 4,300. Plans and specifications were prepared by John Galt, Canada Life Bldg., Toronto, Ont.

VANCOUVER, B. C.—Alderman R. A. McMorvan writes us that Keene & Mowat, of Vancouver, have been awarded the contract for guilding 1,300 ft. of 10-in., and 9,500 ft. of 8-in. pipe sewers; 17 manholes, 5 flushtanks, and 21 lampholes, at $7,597. Col. Thos. A. Tracy, Cy. Engr.

MERIDA, YUCATAN, MEX.—Press reports state as follows: The municipality will be able to set aside annually about $260,000 to meet the cost of the proposed drainage of the city, which is estimated at about $2,500,000. It has not yet been decided whether the proposition of Charles Vezin, contractor for the Mexican sewers, or that of Preston & Son, will be accepted.

GARBAGE DISPOSAL—STREET CLEANING

NEW BEDFORD, MASS.—The garbage disposal plant owned by Edgar H. Gammons was destroyed by fire Dec. 2, causing a reported loss of about $30,000.

PHILADELPHIA, PA.—Local papers state that the following bids were received by the director of public works Dec. 5 for the cleaning of city streets and removal of garbage and snow during the ensuing year: Street cleaning—R. J. & David Peoples, 1st district, $91,000; 2d district, $148,880; 3d district, $52,000; 4th district, $138,400; 5th district, $88,000; 6th district, $28,000. Oliver Wilson, 1st district, $87,297; 2d district, $163,999. Daniel Dooley, 1st district, $87,700; 2d district, $160,000; 3d district, $43,900. Michael F. Gallagher, 6th district, $19,999. Richard P. Bemmis, 6th district, $21,800. R. W. Ellicott, 1st district, $84,777; 2d district, $159,899. Thos. Parker, 1st district, $90,000; 2d district, $149,900; 3d district, $53,000; 4th district, $139,444; 5th district, $84,900; 6th district, $26,000. Robt. Higgins, 3d district, $47,400. Jas. Curran, 4th district, $139,970; Geo. W. Ruch, 1st district, $85,339; 2d district, $147,225; 3d district, $134,980; 5th district, $83,864; 6th district, $21,700. He also put in a

bid for removing ashes and cleaning the streets in the city for $519,000. Daniel McMahon, 1st district, $83,950; 2d district, $147,750; 3d district, $43,950; 4th district, $134,750; 5th district, $84,993; 6th district, $23,000. Edwin H. Vare, 1st district, $83,700; 2d district, $144,808; 3d district, $47,000; 4th district, $159,000; 5th district, $94,987; 6th district, $30,000. John Loughlin, 2d district, $148,944; 4th district, $138,690. Removal of garbage—Thos. Parker, 1st, 2d and 3d districts, $225,000. W. McClintock, 4th district, $139,000; 5th district, $129,000. American Product Co., entire city, $358,000. Removal of snow from central part of the city—R. J. & David Peoples, 90 cts. for single loads and $1.30 for double loads. D. J. McMechall, 95 cts. a single load; $1.30 a double load.

RICHMOND, VA.—The council proposes to purchase several new street sweeping machines, etc. Julius Hobson, Chn. Com.

YOUNGSTOWN, O.—The board of health and the committee of the council are considering plans for the collection and disposal of the garbage of this city.

ST. PAUL, MINN.—The following bids were received by the assembly Dec. 1 for collecting and removing garbage and dead animals from the streets for the coming year; the bids for this year are also given for comparison:

	1899.	1898.
District 1—R. Langan	$749	$900
District 2—W. H. Burns	845	900
District 3—R. Langan	1,000	1,200
District 4—R. Langan	1,449	2,000
District 5—P. O'Donnell	1,320	1,285
District 6—F. Peters	820	850
District 7—R. Langan	1,698	2,341
District 8—W. J. Preston	1,690	1,329
District 9—Peterson & Anderson	1,212	1,212
District 10—R. Langan	480	740
District 11—R. Langan	480	699

LITTLE ROCK, ARK.—The question of constructing a garbage disposal plant is under consideration, according to reports.

HAVANA, CUBA.—President McKinley has authorized, from available funds, the expenditure of $50,000 for cleaning the streets, etc., of the city, so as to make it as healthful as possible for the residence of soldiers and citizens. Marquis Esteban, Mayor of Havana, and General Greene, U. S. A., may be addressed.

STREETS AND ROADS

ORLEANS, MASS.—The town voted Nov. 21 to appropriate $20,000 for the purchase of a stone crusher and the improvement of roads.

BUFFALO, N. Y.—Bids are asked until Dec. 13 for paving Park View Ave., between Winchester Ave. and Duerstein St. R. G. Parsons, Secy. Bd. Pub. Wks.

NEWARK, N. J.—The Essex County Park Commissioners are considering a proposition to construct a boulevard along the east bank of the Passaic River, from Woodside to the Passaic county line, according to reports.

ROCHESTER, N. Y.—The board of county supervisors has passed a resolution to improve East Ave. and Little Ridge Road, at an estimated cost of $42,000. Chairman Wellington may be addressed.

TROY, N. Y.—Reports state that plans and estimates for the macadamizing of the Hoosick Road, to cost about $20,000, will soon be submitted by the state engineer to the county supervisors.

YONKERS, N. Y.—Bids are asked by the council until Feb. 27 for the grading of Riverdale Ave., from Culver St. to the city line, according to reports.

ATLANTIC CITY, N. J.—The council has decided to ask bids for paving several cross streets with macadam. It has been decided to submit a proposition to the Pennsylvania R. R. Co. to pave Atlantic Ave., between Massachusetts and Florida Aves., with brick, the city to pay 60% of the original cost and the railroad company to pay the balance and keep the avenue in repair.

LOCK HAVEN, PA.—Reports state the county commissioners propose to construct a road about 20 miles long, to cost about $8,000 per mile.

MEADVILLE, PA.—Bids are asked until Dec. 15 for about 3,320 lin. ft. of curbing, 6 × 22 ins., including corners; 3,120 sq. yds. of brick paving on concrete foundation, including grading, and 300 ft. of sewer, etc., as described in our advertising columns. W. A. Doane, Cy. Engr.; D. F. McKay, Jr., Cy. Clk.

PITTSBURG, PA.—Bids are asked until Dec. 15 for grading, paving and curbing on Shakespeare St., and grading portions of Calvary, Graphic and Harlem Sts. E. M. Bigelow, Dir. Dept. Pub. Wks.

BALTIMORE, MD.—Reports state that the county commissioners will purchase a stone crusher to be used at Kingsville, Md.

JACKSONVILLE, FLA.—Bids are asked until Dec. 22 for grading an area of about 20,350 sq. yds., and furnishing and constructing about 15,454 lin. ft. of stone curbing and 21,000 sq. yds. of brick paving on Main St., as stated in our advertising columns. Philip Prioleau, Cy. Engr.

GEORGETOWN, KY.—Bids are asked until Dec. 20 for the purchase of $46,000 of turnpike bonds, according to reports. J. J. Yates, County Judge.

ALLIANCE, O.—This city is considering the question of paving Union Ave. with asphalt and South, West and Freedom Sts. with brick. J. McConnell, Cy. Clk.

LIMA, O.—Bids are asked until Dec. 19 for the purchase of $40,000 of 5% paving bonds. C. E. Lynch, Cy. Clk.

SANDUSKY, O.—A. W. Miller, Cy. Clk., informs us that nothing has been done as yet toward paving Campbell St. J. C. Brewer, Engr., Sandusky.

ELKHART, IND.—We are informed that the resolution to pave 40,000 sq. yds. with brick, at an estimated cost of $50,600 has been favored unanimously by the council. Payment will be made under Barrett law. Property owners will have choice of cash 30 days after acceptance or 10-year bonds at 6% interest. D. F. Cordrey, Engr.

VALPARAISO, IND.—Bids are asked until Jan. 7 for constructing the Valparaiso-Chesterton gravel road. Jas. S. Fulton, County Comr.; M. J. Stinchfield, Audr.

ST. LOUIS, MO.—The board of public improvements will hold a meeting Dec. 20, to consider the question of improving about 36 streets. Robt. E. McMath, Pres.; Emory S. Foster, Secy.

SAN DIEGO, CAL.—City Engineer Capps has reported to the council that 7,340 cu. yds. of excavation and 6,600 cu. yds. of fill is necessary for the grading of B St., between 21st and 25th Sts.

SAN PEDRO, CAL.—The chamber of commerce has asked the board of trustees to call an election to vote on the question of issuing $20,000 in bonds for street and sewer work.

MONTREAL, QUE.—The roads committee received estimates Nov. 29 from City Surveyor St. George, for work for the coming year, including $249,649 for macadamizing, $5,000 for pavement repairs and $75,332 for wooden sidewalks.

QUEBEC, QUE.—The road committee has resolved to ask the committee on amendments for authority to issue $250,000 in bonds for street paving and other improvements. The mayor has suggested paving with asphalt, portions of Grande Allee, St. John, Desfosses, St. Peter, St. Andrew, St. Paul and Crown Sts., and repairs for Mountain Hill.

AMHERSTBURG, ONT.—The council proposes to pave several streets at a cost of about $5,000, according to reports. J. H. C. Leggatt, Town Clk.

MANUFACTURING PLANTS.

GREAT WORKS, ME.—Merrill & Hartwell, of Oldtown, are reported to have been awarded the contract for the erection of an addition to the Penobscot Chemical Fibre Co.'s mill at this place.

OLDTOWN, ME.—Reports state that the Ounegan Woolen Mill Co. will erect a new woolen mill at this place. Lockwood, Green & Co., Archs., Boston, Mass.

FALL RIVER, MASS.—Chauncy H. Sears, of this city, has been awarded the contract for the erection of a hat factory building for Marshall Bros.

ALBANY, N. Y.—The shirt factory of Wallerstein & Co., at Broadway and North Ferry St., was damaged by fire Dec. 2; loss, about $61,000.

CANAJOHARIE, N. Y.—A fire here Dec. 1 destroyed the plant of the Petitt Candy Mfg. Co.; reported loss, about $35,000.

DURHAMVILLE, N. Y.—Reports state that a new glass factory will be erected at this place.

JOHNSTOWN, N. Y.—Styer & Behlen contemplate the erection of a 4-story addition to their mill on West State St.

NEW YORK, N. Y.—The 7-story brick building, 44 to 48 West 3d St., occupied by Hein & Fox, hat manufacturers, and others, was destroyed by fire Dec. 1; loss, about $175,000.

NEW YORK, N. Y.—It is reported that a 1-000-ton ice plant will be erected on 133d St., near Alexander Ave. Jacob Ruppert is said to be interested.

NIAGARA FALLS, N. Y.—The Union Carbide Co., of this place, will, according to reports, erect an addition to its plant, 800 × 100 ft.

NEWARK, N. J.—Reports state that the Otis Elevator Co., 38 Park Row, New York, will erect a factory in this city. James B. Dill, East Orange, N. J., is interested.

ATHENS, PA.—Fire here destroyed the Athens Car & Coach Works; loss, $12,000. C. F. Daly, Proprietor.

BLOOMSBURG, PA.—A fire Dec. 2 destroyed the Bloomsburg Novelty Works. Reported loss, $50,000; insurance, $25,000. It will probably be rebuilt.

BRIDGEWATER, PA.—Reports state that a new steel billet plant will be located here.

CANONSBURG, PA.—It is reported that the Canonsburg Iron & Steel Co. has awarded the contract for the erection of additional buildings to its plant to the Riter & Conley Mfg. Co., of Pittsburg, Pa.; also a contract for the erection of a keg factory to Schaff & Co., of Pittsburg.

GROVE CITY, PA.—Reports state that George Anderson, Greenville, Pa., will erect a spoke, rim and handle factory at this place.

KANE, PA.—The McCloy Glass Co., of this place, according to reports, will increase its capital stock from $125,000 to $250,000, in order to enlarge its plant.

MILTON, PA.—The nail plant of the F. A. Godcharles Co. was destroyed by fire Dec. 3. Estimated loss, $80,000; insurance, $25,000.

PHILADELPHIA, PA.—Bids are being received, according to reports, for a new 5-story factory building for Feis & Co., to replace the one recently burned on Tinicum Island Road. Hales & Ballinger, 102 South 12th St.

READING, PA.—The Reading Iron Co., according to reports, will erect two buildings for its rolling mill plant at this place.

SEWICKLEY, PA.—Reports state that the Berwind-White Co. will establish an extensive coal plant here.

SHARON, PA.—Reports state that the Aschman Steel Castings Co. will soon award contracts for erecting a 10-ton furnace, two electric traveling cranes, one gas producer, two annealing ovens, and a 100-HP. boiler.

BALTIMORE, MD.—The National Brewing Co. expects to erect a storage house, 57 × 65 ft., a warehouse, 35 × 65 ft., cooperage and additional underground cellars, two 200-HP. boilers, 35-ton ice machines, artesian well, and five iron water tanks, to cost about $100,000. Otto C. Wolf, Arch., 1345 Arch St., Philadelphia, Pa.

BALTIMORE, MD.—Reports state that Henry Ripple has been awarded the contract for erecting a new factory building for the Carr-Lowrey Glass Co., at Westport. J. C. Scott, Arch., Baltimore.

SALEM, VA.—The Salem Fertilizer Co. has been granted a permit to erect a plant here for the manufacture of bone meal and fertilizer.

WESTON, W. VA.—The West Virginia & Pittsburg R. R. Co. has awarded the contract for the erection of four new shops to McBride, Arnold & Co., at $17,732.

ROCKMART, GA.—The New York Mills Co., of New York Mills, N. Y., contemplates the erection of a plant at this place, the main building of which will be 275 × 128 ft.; reported cost, about $400,000. S. R. Campbell, Treas.

PADUCAH, KY.—J. R. Bennett, Wm. Roch, and L. W. Johnson, of St. Louis, Mo., will erect a brewery, having a capacity of 40,000 bbls. a year. Reported cost, $140,000.

IRONTON, O.—William Banfield, of Wallace, Banfield & Co., it is reported, will soon erect a sheet mill.—The Kelly Nail & Iron Co. will spend about $40,000 on improvements to its plants.

WEST BAY CITY, MICH.—A fire here Nov. 28 destroyed the hardwood factory of W. D. Young & Co. Loss, $100,000; insurance, $45,350. It will probably be rebuilt.

ESSEXVILLE, MICH.—It is reported that a new sugar factory will be erected here. Worthy L. Churchill, Alpena, Mich.; E. N. Salling, Manistee, Mich.; Thos. Pitts, Detroit, Mich., and others are interested.

HOUGHTON, MICH.—A fire in this city Nov. 28 destroyed the Franklin Stamp Mill. Loss, about $50,000; insurance, $30,000.

MONROE, MICH.—It is reported that a 3-story beet sugar factory, 150 × 40 ft., will be erected here. Col. Francis, of Chicago, Ill., is said to be interested.

JOLIET, ILL.—A fire Nov. 27 destroyed the Lakeside mill, owned by David Oliver, of Chicago. Reported loss, $40,000; insurance, $23,500.

JANESVILLE, WIS.—Mayor Thoroughgood, of this place, has asked for a loan of $20,000, so as to permit the Janesville Furniture Co. to increase the capacity of its plant.

MILWAUKEE, WIS.—The Schlitz Brewing Co. is said to contemplate the erection of a $70,000 building. Kirchhoff & Rose, Archs., 201 Grand Ave.

QUINNESEC, WIS.—The Kimberley & Clark Co. contemplates the erection of a paper and a ground wood mill at this place.

PRICE, UTAH.—The Tait Milling Co. contemplates the erection of a flouring mill at this place. S. K. Straussmider, Business Mgr., Chickasha, Ind. Ter.

SHANGHAI, CHINA.—T. C. Yen, representing a Chinese syndicate, reports that the erection of a 500-bbl. flour mill in this city is projected.

GAS PLANTS.

BUFFALO, N. Y.—Wm. H. Pearson, Jr., Vice-Pres. Economical Gas Apparatus Co., Toronto, Ont., has been engaged by the commissioners of public works to prepare plans for the proposed municipal gas plant.

PHILADELPHIA, PA.—A contract has been awarded to Chas. E. Day, Camden, N. J., for the erection of a storehouse, 50x90 ft., of galvanized iron, for the Pittsburg & Philadelphia Oil Refining Co.—The United Gas Improvement Co. will construct a two-story brick and iron testing station, 22 × 44 ft. Wilson Bros. & Co., Archs.

WILLIAMSPORT, PA.—Reports state that the Williamsport Gas Co. proposes to erect a brick and iron building, estimated to cost $50,000; also to extend the mains through South Williamsport.

HILLSDALE, MICH.—The Hillsdale Gas Co. will expend $2,500 for new pipes, retorts, purifying boxes, scrubber, etc. F. H. Stone, Receiver.

JOLIET, ILL.—The Joliet Gaslight Co. has filed a trust deed for $300,000 with the American Trust & Savings Bank of Chicago. The money secured will be used to take up an old issue of bonds, amounting to $225,000, and for improvements in the local plant, according to reports.

OAK GROVE, IND.—Reports state that a gas company has been organized to sink wells and furnish gas for a portion of the city. John T. Ellis, Monroe Huntzinger, Frank P. Foster, J. Kirkham, Dr. Lail and others are interested.

GALT, ONT.—A by-law will be submitted to a vote Dec. 17 to issue $67,750 for the purchase of the gas and electric light plants, according to reports.

NEW COMPANIES.—The Great Eastern Oil & Gas Co. of Pennsylvania, Towanda, Pa.; to bore for oil and gas in Bradford county; Pres., S. D. Sterigere; Vice-Pres., Joseph Ochs; Treas., L. R. Frost; Secy., M. M. Spaulding.

Deka Oil Co., Cleveland, O.; $250,000; to operate oil and gas wells; S. J. Kerrihan, W. D. Kerrihan, M. R. Boals, George T. Chapman, F. M. Skinner.

Hamilton Natural Gas Co., Greensburg, Ind.; $10,000; G. L. Hamilton and others.

Kansas Gas Co., Topeka, Kan.; $25,000; to pipe gas from Iola, Kan., to Kansas City; Perry C. Phillips, Kansas City, and F. H. Hersch, A. P. Charles, J. H. Binford and C. E. Birdsall, of Iola.

The Lone Star Acetylene Gas Co., Tyler, Tex.; $50,000; D. F. Ewing, A. W. Palmer, Thomas Henderson, W. A. Stapp.

New Cumberland Gas Co., Pittsburg, Pa.; $50,000, with $500 paid in; to deal in natural gas; M. C. Egbert, V. E. Egbert, F. M. Bullock, C. S. James, C. A. Daily, Pittsburg, Pa.

Essex & Hudson Gas Co., 575 Broad St., Newark, N. J.; $6,500,000; to manufacture, etc., illuminating and fuel gas; Thomas N. McCarter, Jr., 765 Broad St., Newark; George S. Philler and Elmer Smaling, Drexel Bldg., Philadelphia, Pa.

Millbrook Gas & Electric Co., Millbrook, N. Y.; $15,000; Wm. E. Smith, Millbrook; Richard Scoles, Samuel Thorn, New York city.

Menzie Oil & Gas Co., Peru, Ind.; $10,000; to drill and operate oil and gas wells; Julius Falk, Joseph Andrus, Jos. M. Bergman, Geo. R. Chamberlain, Chas. T. Clark, Jos. S. Young, Clarence Henzie.

Lawrence Gas, Oil & Mining Co., Lawrence, Kan.; $500; O. W. Murphy, J. H. Glathart, S. D. Bishop, Louis C. Poehler and Albert Glathart, all of Lawrence.

Connotton Oil & Gas Co., Scio, O.; $10,000; J. H. Beal, J. M. Spiker, W. G. Compher, J. M. Adams and S. W. Canagan.

MISCELLANEOUS CONTRACTS.

CONDUITS.—Atlantic City, N. J.—Chief Engineer Wiesenthal has advised the council to construct underground conduits for the placing of city electric wires.

FIRE ALARM SYSTEM.—Mobile, Ala.—The council has awarded a contract to the Gamewell Fire Alarm Telegraph Co., at $12,630, for installing a fire alarm system.

FIRE ALARM SYSTEM.—Lancaster, O.—The Gamewell Fire Alarm Telegraph Co., New York, N. Y., has a contract, at $5,400, to install a fire-alarm system of 38 alarm boxes.

DIKES, ETC.—Portland, Ore.—Bids are asked until Dec. 15 for constructing dikes, etc., in the Columbia River and Hayden Slough, Ore. Maj. W. L. Fisk, U. S. Engr., Portland.

FIRE ALARM SYSTEM.—South Orange, N. J.—The board of village trustees has awarded a contract to the Gamewell Fire Alarm Telegraph Co. to construct a system, to cost $2,700.

SALE OF TELEPHONE FRANCHISE.—Duluth, Minn.—Bids are asked until Jan. 16 for the purchase of a telephone franchise, as stated in our advertising columns. H. W. Cheadle, Cy. Clk.

CHANNEL WORK.—Sioux City, Ia.—Alderman Hermann, Chn. Health Com., recommends a proposition to straighten the channel of the Floyd River at the southern end, to cost about $4,000.

PIERS.—Brooklyn, N. Y.—Reports state that bids will be asked by the dock board in about two weeks for the construction of two piers on the Wallabout Basin, to cost $75,000. Ch. Engr., John A. Bensel.

TELEPHONE WORK.—Chattanooga, Tenn.—The Postal Telegraph Co. awarded a contract Nov. 26 to the East Telephone Co. for the construction of a line between this city and Knoxville on the existing poles.

PILES AND PLANK.—New York, N. Y.—Bids are asked until Dec. 16 for furnishing about 4,000 piles, from 60 to 85 ft. long, and about 500,000 ft. B. M. of sawed spruce plank. J. S. Cram, Comr. Docks, Pier A, North River.

POLICE TELEGRAPH SYSTEM.—St. Paul, Minn.—The council is considering the question of installing a new police patrol telegraph system. Comptroller McCardy, Assemblyman Kirke and Gustave Willus, Jr., Com.

TUNNEL WORK POSTPONED.—Boston, Mass.—In consequence of an injunction, served upon the Boston transit commission, the date of receiving bids for the construction

of the East Boston tunnel has been postponed until further notice, as stated in our advertising columns. B. Leighton Beal, Secy.

DOCKS.—St. Lawrence River, N. Y.—Reports state that a contract has been awarded to Capt. E. W. Visger, Alexandria Bay, N. Y., for the construction of docks along the St. Lawrence River, comprising the international park.

HARBOR WORK.—Toronto, Ont.—The board of control and the harbor commissioners are considering a proposition to improve the eastern entrance of the harbor at a cost of about $200,000, and the western channel, at $403,500.

TELEPHONE LINE.—Joplin, Mo.—The Missouri & Kansas Telephone Co. is preparing to construct a long-distance line between Joplin and Fort Smith, and will also soon commence work on a line from Carthage to Springfield.

DIRT FILL.—Edgemont, S. Dak.—Reports state that the railway bridge over Sheep Canon north of this place is to be taken down and the gulch to be filled with dirt, requiring about 300,000 cu. yds. of material, at a cost of about $150,000.

CONDUIT SYSTEM.—St. Louis, Mo.—Superintendent Benedict received bids Nov. 28 for the construction of a conduit system for the city wires, from the Southern Electric Supply Co., at $13,618, and the Western Electric Supply Co., at $14,190.

LEVEE WORK.—New Orleans, La.—Bids are asked by the state board until Dec. 12 for constructing the Salem levee, East Carroll parish, to contain about 100,000 cu. yds. of earth, from 14 to 17 ft. high and about 2,500 ft. long. Sidney F. Lewis, Engr.

WHARF.—Havana, Cuba.—We are informed that the American Indies Co., 100 Broadway, New York, has received a contract from the U. S. government to build a wharf at Triscornio, on the harbor of Havana, and of 7 miles of railway, as stated under Railways.

TELEPHONE LINE.—Newtown, Pa.—Bids will be asked by the Standard Telephone Co. for the extension of their line from Newtown to Doylestown and from Eden to Bristol. It is proposed to later extend the line from Newtown to Trenton, via Yardley and Morrisville.

ENGINES AND BOILERS.—La Rochelle, France.—Reports state that several steam engines of 35 HP. and boilers to supply these engines, of American make, are desired in the consular district, the cost, including transportation, not to exceed $2,000. Address Grenfel Stewart, 13 Rue du Palais, La Rochelle.

TELEPHONE FRANCHISE.—Springfield, O.—I. Ward Freye, Charles H. Pierce, E. C. Guin, Robert Gotwald and Robert Mills, of this city, and others applied to the board of public affairs Nov. 30 for a franchise to organize the Springfield Telephone Co., with a capital stock of $50,000. E. D. Juvenal, representing a Chicago company, has also applied for a franchise, accord.ng to reports.

DRAIN TILE.—Philo, Ill.—J. L. Ray, Atty., Imbarras River Drainage District, Champaign, Ill., informs us that the following bids were received Nov. 29 for furnishing 8,810 ft. of drain tile from 6 to 16 ins.: James M. Waugh, Crawfordsville, Ind., $970; John R. Stanton, White Hall, Ill., $1,286; Geo. E. Zimmisky, Paris, Ill., $940, S. C. Cowgill, Summitville, Ind. (accepted), $749.

FIRE APPARATUS.—New York, N. Y.—Bids are asked until Dec. 14 for furnishing 12,000 ft. of 1½ and 2½-in. circular knit jacket cotton, rubber lined fire hose; three fourth size steam fire engines with La France pumps, and one fourth size steam fire engine with Fox sectional water-tube boilers; two first size steam fire engines with Fox sectional water-tube boilers and one first size La France steam fire engine. John J. Scannell, Fire Comr., 157 East 67th St.

REMOVING WRECK.—Philadelphia, Pa.—We are informed that the following bids were received Dec. 5 for removing the wreck of the schooner "Joseph R. Ellis," in the Delaware River, near Finicum Island. Lieut.-Col. C. W. Raymond, U. S. Engr., P. O. box 812, Philadelphia: Wm. H. Keates, Atlantic City, N. J. (recommended for acceptance), $395; River & Harbor Improvement Co., Camden, N. J., $600; Chas. W. Johnson, Lewes, Del., $845; Jas. J. Cowgill, Paulsboro, N. J., $844.

TELEPHONE SYSTEM.—Chicago, Ill.—Reports state that a company in which Messrs. Armour, Swift and Nelson Morris are interested has been incorporated to construct an independent telegraph and telephone line to connect the packing houses in the west with the Chicago houses. The proposed line is to connect East St. Louis, Omaha, Sioux City, St. Joseph and Kansas City. The company is offering for sale $500,000 of gold bonds. It will transact a general telegraph and telephone business.

FLOATING AND GRAVING DOCK.—Algiers, La.—We are informed that the navy department received bids Nov. 30 for constructing a combined floating and graving steel dock, from Charles R. Bradbury, New York, N. Y., at $850,000, and the Maryland Steel Co., Sparrow's Point, Md., at $810,000, to build the dock according to the plans of the bureau, and at $837,000, including additional equipment not provided. M. T. Endicott, Ch. Bureau Yards and Docks, Washington, D. C.

BOILERS, MACHINERY, ETC.—Detroit, Mich.—The following bids were received Nov. 28 for furnishing two sets of boilers, machinery, etc., for four complete steam fog signals, advertised in Engineering News, Nov. 24. Lieut.-Col. M. B. Adams, U. S. Engr., Detroit:

Fulton Iron & Engine Works, Detroit...	....$4,496
D. Connelly, Cleveland, O.....	4,634
John P. McGuire, Cleveland, O.....	4,950
*Thomson Kingsford, Oswego, N. Y....	9,299
James Clark Co., Baltimore, Md.....	11,966

*Alternative bid, $9,275.

CONTRACT PRICES.

FACE OF SEAWALL.—Tompkinsville (S. I.), N. Y.—The following bids were received by Lt.-Col. D. P. Heap, U. S. Engr., Dec. 1, 1898, for constructing the east face of the north seawall at the lighthouse depot, S. I., as advertised in Engineering News:

Michael Flaherty & Co., 135 Broadway, N. Y....	$170.00
Johnston & Reynolds, Girard Bldg., Philadelphia	177.95
Weil & Raynor, 258 Broadway, New York	197.00
Central Contracting Co., 99 Cedar St., New York	197.80
International Contracting Co., Syracuse, N. Y. ..	200.00
Frank Rinschler, Stapleton, S. I., N. Y.	212.00
Brown & Lowe, 99 Cedar St., New York	212.50
Frank Pidgeon, Saugerties, N. Y.	214.00
Wm. H. Masterton, 231 East 86th St., New York..	239.00
Wm. H. Flaherty & Co., 80-82 Reade St., N. Y...	245.50
S. W. Prescott & Co., Reading, Pa.	257.79
R. P. & J. H. Staats, 29 Broadway, New York...	260.00
W. H. Jenks, 130-2 Pearl St., New York.....	285.87
P. Sanford Ross, 277 Washington St., Jersey City	290.50
John T. Rowland & Sons, 197 1st St., Jersey City.	294.60
Andrew McMillan, 894 East 135th St., New York..	297.70
Spearing & Preston, 11 Broadway, New York.....	336.84

GUN FORGINGS.—Washington, D. C.—We are informed that the following bids were received Nov. 26, 1898, for 12 sets of 12-in. gun forgings: Bethlehem Iron Co., South Bethlehem, Pa., 18 cts. a lb.; and Midvale Steel Co., Philadelphia, Pa., 19 cts. a lb.

BRICK SEWER.—Toledo, O.—Thomas Kelly submitted the lowest bid Nov. 21, 1898, as follows, for building a brick sewer in Paine Ave.: 84-in. brick sewer with 13-in. shell, $7.64 a ft; 60-in., with 19-in. shell, $6.25.

STREET CLEANING.—Jersey City, N. J.—Henry Byrne has been awarded the contract for street cleaning as follows: Sweeping streets, a mile, $9.13; sweeping asphalt-paved streets, $6.64 a mile; removing ashes and garbage during the entire year, $14,110. The total appropriation for street cleaning and garbage removal is $40,000. With the $14,110 for garbage collecting deducted there will be $25,890 left to pay for street cleaning at $9.13 and $6.64 a mile for Belgian block and asphalt paved streets, respectively.

SEWERS.—Scranton, Pa.—The following bids were received by councils Dec. 1, 1898, for constructing sewers in Section C of the 5th district: Donohoe & O'Boyle, Scranton, $2.27 a ft., complete; extra basins, $97.00; extra manholes, $37.00. V. H. O'Hara, Scranton, $2.24 a ft., complete; extra basins, $90.00; extra manholes, $35.00; extra house connections, 60 cts. a ft. Length of sewer, 4,000 ft. of 8, 10, 12, 15, 18, and 24-in. pipe. Average depth, 10 ft. The price per ft. includes the building of 23 manholes, 16 basins, and 140 house connections (about 2,800 ft.). Jos. P. Phillips, Cy. Engr.

SIDEWALK.—Louisville, Ky.—The board of public works received the following bids Dec. 1, 1898, for constructing granitoid sidewalks in Hill St.: L. R. Figg, $1.60 a sq. yd.; L. D. Robertson, $1.71; Louisville Artificial Stone Co., $1.89; Charles Fitch, $1.94; National Roofing & Supply Co., $1.80.

ASPHALT PAVING.—Jersey City, N.J.—The New Jersey Mexican Asphalt Co. submitted the lowest bid Nov. 29, 1898, for asphalt paving in Prospect St., at $1.74 a sq. yd.

SAND.—New York, N. Y.—The U. S. Engineers, Army Bldg., received the following bids Nov. 28, 1898, for furnishing 3,000 cu. yds. of fine sand: Phoenix Towing & Transporting Co., 39½ cts. a cu. yd.; Murry & Reid, 36 cts.; H. Godwin, 38 cts.; W. J. McGuire, 31 9-10 cts.

RAILWAY SUPPLIES.—Havana, Cuba.—Col. A. S. Kimball, Q. M., U. S. A., Army Bldg., New York, received the following bids Nov. 30, 1898, for furnishing supplies for a small government railway in Cuba:

Bids Received at Havana, Cuba, Nov. 30, 1898, for Furnishing Railway Supplies.

Quantities.		A. Gerry.	Manhattan Supply Co.	F. W. McNeal.	Thornton Motley.	Stand. Sup. & Equip. mentCo.	Benj. Watson.
60-lb. steel rails (30 ft. 4¼ ins.)	370 each...	$5.70	$22.00[1]	$5.47	$5.49	$5.47	$4.50
4-hole angle bars, 24-in., per pair	400 pairs...	.50	.57	.47	.47	.....	.....
¾-in. track bolts (3½-ins. long)	1,700 each...	.05	.0209	.01⅝	.01⅝	.....	.01½
5 × 9-16-in. spikes	25 kegs...	...	3.30	2.90	3.00	3.20	3.00
7 × 9 ins. ? 8½ ft. oak cross ties	3,000 each...	....	.70[2]	.57	.80	.69	.....
Foot-split switches	715 " ...	20.00	22.00	17.84	18.75	18.47	22.50
No. 8, 4½-in. frogs	8 " ...	15.00	16.00	12.49	13.50	19.72	15.00
Switch stands, 5-in. throw	7 " ...	12.00	14.00	.....	16.00	6.21	5.00
8 × 8 ins. × 15 ft. hemlock timbers	14 " ...	.....	3.00[3]	.17½	.....	.49	...
4 ft. × 8½-in gage, Sheffield push cars	2 " ...	.....	34.70	49.35	.....	42.00	...
Sheffield hand-cars, same gage	.....	.....	67.40	40.95	49.75	53.00	...
Lining bars, a lb.	12.....	.....	.05¼[4]	.76[4]	...	.72	...
Claw bars (L. S. & M. S. Ry. pattern), a lb	6.....	.....	.07½	1.05[4]	...	2.05	...
4 ft. 8½-in. gage Huntington track gage...	3 each...	.....	3.00	7.12[3]	...	1.24	...
8-lb. spiking mauls	12 " ...	.....	2.75	.49	.35	.34	...
Track wrenches, with 1⅝-in. jaw, a lb.	12.....	.....	.12	1.30	.36	.35	...
Track chisels	12 each...	.....	.13	.89	.49	.43	...
Track level boards with spirit level	2 " ...	.....	5.00	1.22	1.45	1.70	...
Packer ratchets	2 " ...	.....	9.00	2.94	4.45	5.00	...
1½-in. horse twist drill bits	6 " ...	.....	.75	1.32	.82½	1.19	...

[1]A ton. [2]Best quality of pine. [3]The lot. [4]Each.

BRIDGE ABUTMENTS. — Charlemont, Mass.—A. B. Fletcher, Secy. Massachusetts State Highway Comn., Boston, informs us that the following bids were received Nov. 17, 1898, for building the abutments of a bridge over Mill Brook in this town: Cement masonry, 300 cu. yds.—W. N. Flynt Granite Co., Monson, Mass., $10.90; Jarvis Engineering Co., Boston, $8.67 (accepted); Wm. D. Carr, Boston, $9.97; M. A. Culbert, Boston, $11.75; Tuttle & Edgerly, Swampscott, $10.00.

INDUSTRIAL NOTES.

THE NEW YORK DREDGING CO., World Bldg., New York, has the contract to dredge the Christiana River, at Wilmington, Del.

THE VULCAN IRON WORKS CO., Toledo, O., reports a good business during the past season, having run its plant day and night all summer.

W. G. NAGEL & CO., Toledo, O., has been organized for the purpose of conducting a general business in electrical machinery, supplies and construction, in Toledo.

THE OTTO GAS ENGINE WORKS, Philadelphia, has received the gold medal for gas and gasoline engines, exhibited at the Trans-Mississippi Exposition at Omaha, Neb.

THE PITTSBURG TERRA COTTA LUMBER CO., Pittsburg, has an order for 1,000 tons of dense fireproofing tile for the power-house of the Dublin Tramway Co., Dublin, Ireland. The company has also an order for fireproofing a new municipal building now being erected in the City of Mexico.

A. A. TALMADGE & CO., St. Paul Bldg., New York, have an order for switches and general track equipment, including tools, etc., and for bridge and dock timbers for the Government R. R., which is being built in Cuba. A similar order has also been received from the Clearfield Southern R. R. Co., Clearfield, Pa.

THE CONSOLIDATED PNEUMATIC TOOL CO., 11 Broadway, New York, has been placed in charge of Mr. John H. Hull, as Receiver, on application of Mr. Horace D. Gove, who holds a judgment for $11,195 against the company, according to report. The assets are said to consist only of the patents which, were originally valued at $50,000.

MR. EARL C. BACON, Havemeyer Bldg., New York, has recently shipped to Japan and China a number of winding engines for use in the coal and other mines of those countries. They were specified by the engineers of the Chinese and Japanese imperial governments. This concern has also sent considerable machinery to Siberia within the past 30 days.

THE MANHATTAN CONCRETE CO., 156 Fifth Ave., New York, is reported to have made an assignment to Mr. Henry L. Fridenberg, with liabilities of $60,000 and actual assets of about the same amount. The assignment is said to have been precipitated by liens being filed on the company's contracts in favor of the Standard Silica Cement Co., 66 Maiden Lane, New York.

THE COMMON-SENSE RAIL-JOINT CO., 304 Tacoma Bldg., Chicago, has succeeded the firm of Hill & Jennings, which for some time has controlled the patents and manufactured the Heath rail-joint. The new company has a form of rail-joint, to be known as the "New Common-Sense Rail-Joint," which was illustrated and described in Engineering News of Nov. 24. Mr. J. V. Ayer is secretary and president of the company, and Col. W. E. Dunn is the manager.

THE GILLETTE-HERZOG MFG. CO., Minneapolis, Minn., is pushing the addition to the plant of the Minneapolis Rolling Mill Co., Minneapolis, and expects to have it completed and ready for the production of steel in January. The latter company has manufactured over 100,000 tons of bar iron in the 10 months it has been running, and with the addition of the open-hearth furnace plant it expects to turn out 20,000 tons of iron and steel next year. Mr. E. R. Dutton is the Structural Engineer.

THE BETHLEHEM IRON CO., South Bethlehem, Pa., furnished the engine forgings and shafting for the new U. S. torpedo boat "Davis," constructed at the yard of Wolff & Zwicker iron Works, Portland, Ore. This boat on her trial trip made an average speed of 23½ knots an hour, which was a knot more than the contract speed, the shaft making on an average 382 revolutions a minute. The company also furnished the engine forgings and shafting for the U. S. torpedo-boat destroyer "Farragut," which made over 30 knots on her trial trip.

THE SPRINGFIELD GAS ENGINE CO., Springfield, O., has leased the first and second floors of a building on West Columbia St., in that city, in order to secure additional accommodations, and will increase its force of workmen as soon as the shop can be fitted up. The company recently furnished a gas engine to the Sun Publishing Co., Springfield, for use in running a large Cox dopplex printing press. The officers of the company are: Pres., R. H. Rodgers; Vice-Pres., Chas. H. Paxton; Secy. and Gen. Mgr., Addison S. Rodgers.

THE BERLIN IRON BRIDGE CO., East Berlin, Conn., is erecting a fireproof blacksmith shop, about 40 ft. square and two stories high for the Waterbury Mfg. Co., Waterbury, Conn. The floor consists of concrete on corrugated iron arches, supported by steel beams and columns, and the roof is of steel trusses carrying a covering of corrugated iron lined with patent anti-condensation lining.—The company is also erecting a riveted lattice girder bridge of about 70 ft. span, with steel floor beams, for the town of Whitehall, N. Y., designed to carry the weight of a steel road roller, besides ordinary traffic.

THE MESTA MACHINE CO., Pittsburg, has been formed by the consolidation of the Robinson-Rea Mfg. Co., Pittsburg, and the Leechburg Foundry & Machine Co., Leechburg, Pa., and has purchased a tract of about 10 acres of land near Homestead, Pa., on which, reports state, it will erect a plant to cost about $500,000. The new company will manufacture sand, chilled and steel rolls, general rolling mill, steel works and tin-plate machinery; machine-molded steel gears and steel castings. The officers of the company are: Pres., Geo. Mesta; Treas., W. H. Rea; Secy., J. O. Horning; Auditor, W. D. Rowan.

FRASER & CHALMERS, of Chicago, Ill., makers of the Huntington mill, inform us that in the U. S. Circuit Court, of the District of New Jersey, Judge Kirkpatrick has granted an injunction against the Whitaker Cement Co., as a user of the Griffin mill, which is declared to be an infringement upon the mill patented by F. A. Huntington, May 8, 1883. The same firm reports that the 156 Bruckner roasting furnaces furnished to the Anaconda Copper Mining Co. ten years ago are still in use. The furnaces are 8 ft. 6 ins. diameter and 18 ft. 6 ins. long inside, but larger ones have since been built. Some of the fireboxes are stationary and others are mounted on wheels.

THE PITTSBURG BRIDGE CO., Pittsburg, reports good business, having averaged about 1,000 tons for the year. The larger contracts now on hand include: Library and assembly rooms for Leland Stanford Jr. University, Cal.; Forest St. bridge and viaduct, St. Paul, Minn., 235 ft. long; boiler house and engine room, Evansville, Ind., water-works; parochial school, Pittsfield, Mass.; three buildings for the Brandon Italian Marble Co., Middlebury, Vt.; 700 tons of structural material, Mexican Central Ry.; Bruckner roaster building, Pueblo Smelting & Refining Co.; trolley railway bridges over the Youghiogheny River, at Connersville, Pa., and shaker at Lewiston, Idaho.

RANDOLPH & CLOWES, Waterbury, Conn., report that the storm on Sunday morning, Nov. 27, caused the roof of their brass and copper rolling mill to cave in, on account of which they have been somewhat delayed in filling orders for this class of material. The debris of the wreck has been removed, and temporary roofs have been erected over the machinery. The crane mill was to be in running order Dec. 5. The entire brass and copper mill, it is hoped, will be in operation Dec. 12. No damage or interruption occurred in any other department of the works, and the damage to the machinery was less than $1,000, and the cost of a roof will not exceed $12,000, which expenditure will put the mill in better condition than before the accident.

NEW COMPANIES.—The Alabama Steel & Wire Co., Birmingham, Ala.; $2,000,000; Pres., E. T. Shuler, Chicago; Secy., G. H. Shuler, Cleveland, O.

Santiago Mining Co., New York; $200,000, commencing with $1,000; to do a general mining business; James McCallum, Charles R. Lee, H. C. Lum Suden, Charles F. Simes and Job W. Lord.

Federal Mfg. Co., Portland, Me.; $100,000, commencing with $220; to manufacture and sell gas appliances; Pres., George M. Butterick, Boston, Mass.; Treas., Freeman Emmons, Wakefield, Mass.

Contract Work Should Always be Advertised in a Paper Read by Contractors.

Nearly Every Prominent Contractor and Manufacturer of Contractors' Supplies in North America Reads Engineering News.